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"FRUIT WORLD OF AUSTRALASIA."

Representing the Deciduous, Citrus and Dried Fruits Industry of Australasia.

Published the First of each Month.

Editorial and Management Notices.

Articles and Photographs.—The Editor will always be very pleased to receive articles and photographs for publication. Articles on spraying, pruning, drainage, marketing, and other cultural matters, and reports of meetings, are welcomed. Please write on one side of paper only; include name and address (not necessarily for publication). Press matter sent in an open envelope, marked "Printer's MSS.," postage rate: 2 ozs., 1½d. Photographs, if sent in an open-ended package, marked "Photos. only," will travel at 2 ozs., 1½d. A short description of the photos. should be written on the back.

We do not hold ourselves responsible for the views expressed by our correspondents.

Subscriptions.

The annual subscription, post free within Australia and New Zealand, is 8/6. All other places, 10/6, post free. New subscriptions can commence at any date. Subscribers should notify us immediately of any change of address.

Renewal Subscriptions are due during the last month of the term covered by the previous payment, and unless notified to the contrary, the fact that the subscriber continues to accept delivery of the journal, is taken as proof that continuation of the subscription is desired, and we will continue to send regularly until notified in writing or copies are returned through the post.

Advertisements.

"The Fruit World of Australasia" is an advertising medium of proved value. Advertising rates may be had on application to our Head Office, or to agents in the various States, as set out below.

Changes of copy for advertisements must be in our hands on or before the 15th of the month prior to publication.

Readers are asked to make their purchases from our advertisers, who cover all lines of interest to orchardists, at the same time mentioning this journal. By so doing, the grower, the advertiser, and this paper will benefit.

Every care is taken to publish advertisements from reliable houses only, and to see that advertisements of an undesirable nature are not published. The management reserve the right to refuse to publish any announcements that they may regard as undesirable, either from the point of view of the goods offered or in the wording of the advertisement, notwithstanding the fact that a contract may have been entered into for the use of a certain space.

"The Fruit World" Offices (where copies and full particulars are obtainable) are as follows:—

Victoria (Head Office): 9 Queen Street, Melbourne. **New South Wales:** Carruthers, Farrum & Co., 77 King Street, Sydney. **South Australia:** W. F. McConnell, Grenfell Buildings, Grenfell Street, Adelaide. **Tasmania:** Saunders & Co., Murray Street, Hobart. **Western Australia:** D. L. Hetherington, Colonial Mutual Buildings, St. George's Terrace, Perth. **Queensland:** Gordon & Gotch Ltd., Queen Street, Brisbane. **New Zealand:** Gordon & Gotch Ltd., Wellington, Dunedin and Auckland. **Great Britain:** Harvey H. Mason, 1 Mitre Court, Fleet Street, London, E.C., England.

R. E. BOARDMAN, A.F.I.A., Managing Director and Editor.

E. H. WRAGG, Secretary and Advertising Manager.

Tasmanian Director: HON. L. M. SHOOBRIDGE, M.L.C.

NEWS IN BRIEF.

The Conference Shipping Companies have reduced the freight on Apples to 4/- a bushel case, bringing this rate into line which was charged by the Commonwealth Government last season. The considered opinion in the trade is that the freight is still too high.

Tasmania reports a severe attack of Cherry Aphid, which is doing great harm. Methods of dealing with the pest are described in the article by our Tasmanian correspondent.

"The dehydrator should prove a valuable asset to the orchardist, in view of increased production," writes our Tasmanian correspondent.

Essential oils are being successfully manufactured at Gosford, N.S.W., from citrus fruits.

A Cambridge expert will again conduct experiments in the coming season in the cold storage and shipping of Australian fruit to the United Kingdom.

Tasmanian growers approve of the contribution of 3d. per case towards funds for advertising fruit in the United Kingdom.

Complaints were frequent amongst the general public because of the immature fruit rushed on to the markets during the shortage.

"The discovery and perfecting of a fruit fly lure will mean a large increase in planting," writes our Queensland correspondent.

Tasmanian Apple growers recently requested the Acting Prime Minister for a bounty of 3d. per lb. on fresh Apples, and 1d. per lb. on evaporated fruit exported. Dr. Page promised to take the matter to Cabinet.

It is reported that New Zealand made a sale of 50,000 cases of Apples to South American buyers.

There is a wide diversity of opinion in Queensland in regard to the new Fruit Marketing Organisation Act.

Valuable tests continue to be made at the South Australian Government Experimental Orchards at Blackwood and Berri. These experimental orchards set an example to the rest of Australia.

Citrus growers on the Murrumbidgee Irrigation Areas are agitating for the compulsory fumigation of citrus trees affected with Red Scale.

Cattle Plague in W.A.—The outbreak of rinderpest, or cattle plague, has caused alarm throughout the Commonwealth. The germ has never

been isolated: the plague spreads with astonishing rapidity. Strict quarantine measures are being taken to check the plague.

Mr. G. V. Cornwell, General Manager of Tarrant Motors Pty. Ltd., Melbourne, was recently appointed Consulting Director to the Company.

Three-quarters of all work is drudgery, unless we love it and keep cheerful.

EAT MORE FRUIT.**Victorian Railways Department Continues Campaign.**

The Victorian Railways Department deserves congratulation for its steady and well-directed campaign of publicity to induce greater consumption of fruit.

A new poster has now been issued, the picture being of an Australian girl holding a basket of beautiful fruit, with an orchard scene in the background.

Dried and fresh fruits are being sold from the Railway refreshment stalls.

In order to be of the best service to all concerned in this campaign, it is suggested by Mr. A. E. Hyland, Chairman of the Betterment Board, that the various pamphlets, etc., should be standardised, as regards size. Attention to this matter will (1) ensure that pamphlets will be printed of a convenient size to fit into business envelopes.

(2) Where the larger pamphlets are desired, they should have a standard envelope of foolscap size, and also fit the receptacles for such advertising matter.

The suggested size for the pamphlets for business envelopes is 5½ in. x 3½ in. when folded, whilst for the larger pamphlet to fit the foolscap envelope the size should be 8 in. x 3½ in.

The progressive efforts of the department in this matter are cordially esteemed throughout the industry, and are having the desired effect of increasing the consumption of fruit, not only so, but this campaign points the way to similar efforts which should be conducted by the growers' organisations.

NAMES OF FRUIT VARIETIES.**Need for Uniformity.**

Whilst the Pomological Committee of Australia is doing useful work the fact remains that many commercial varieties of fruits are being grown under different names. This is regrettable.

The Pear which is known as Bartlett in W. Australia is called Duchess in S. Australia, and Williams in Victoria.

London Pippin Apples seem to be more generally known as Five Crown. Cleopatra Apples are called New

York Pippin in Tasmania and elsewhere.

The "Trevatt" Apricot is appreciated on the Murrumbidgee Irrigation Areas, N.S.W. Is the correct name Trevatt, or should it be Leawood Perfection? It was previously known as Mildura Blenheim, and some growers desired to get it, were supplied with Blenheim (with the "Mildura" dropped), and to-day are regretting the fact.

These instances could be multiplied: they have commercial and not mere academic significance.

Nurserymen and fruitgrowers could help the work of the Pomological Committee by loyally adopting its recommendations.

But there's some "ginger" wanted.

CO-OPERATIVE EXTENSION URGED.

Mr. J. Donaldson, fruitgrower, of Paradise, S.A., as ex-President of the Australian Conference of Fruitgrowers, and one who is closely in touch with the canned fruit pool negotiations, writes:—

"I would like to see the growers of the different States make use of the coming twelve months, and give serious consideration to the ways and means of helping their own industry by creating more co-operation between the growers of each State, putting more funds and energy into creating their own means of distribution of their products through their own co-operative companies run by themselves."

ORANGES FOR INDIA.

Market for Australian Fruit.

In reply to a recent inquiry from the Premier of New South Wales (Sir George Fuller), the Australian Trade Commissioner in the East (Mr. Sheaf) states that there is undoubtedly a very large market awaiting sweet Oranges, and other Australian fresh fruit in India, when once the difficulty can be overcome of conveying it overseas and handling it on proper lines at its destination.

Rangoon, Calcutta, Madras, Colombo, and Bombay, he points out, are within a short distance by rail of other cities and districts whose total population is equal to that of the United States of America.

AN APPRECIATIVE LETTER.

Mr. R. E. Boardman Thanked.

To the Editor, "Fruit World."

Sir,—At the last meeting of the Mt. Waverley Fruitgrowers' Society, it was unanimously carried that a letter be sent to the "Fruit World," thanking Mr. R. E. Boardman for his splendid articles and letters in the public press on the different matters affecting the fruit industry. My

society very fully appreciates Mr. Boardman's splendid efforts on behalf of fruitgrowers, and take this opportunity of showing that appreciation through the columns of the "Fruit World."—Yours faithfully,

(Sgd.) L. PEPPERELL,

Hon. Secretary, Mt. Waverley Fruitgrowers' Association.

Mt. Waverley, Vic., 17/12/23.

THE CANNED FRUIT POSITION.

Working Basis Agreed Upon.

Canneries Now Operating.

The canning fruits of Australia are being handled this season by the proprietary and the co-operative cannery under a bounty scheme, backed by the Federal Government to the extent of £135,000, the terms of which have been published in earlier editions of the "Fruit World."

After agreement had been reached in the matter of prices to growers and canners, there remained the working details between the canners and the Government to be decided. Knotty problems had to be solved, and several times it appeared that the whole of the proposals would be jettisoned.

However, after much negotiating, the final details were agreed upon, and the factories are now busy processing the Apricot crop: then will follow the Peaches, Pears, Pineapples, etc., in due order.

It is hoped that the price to be paid to growers for Cling Peaches will be £10 per ton, instead of £9, as provided under the Federal Government's bounty scheme.

MR. W. B. CHAFFEY, C.M.G.

The honor done to Mr. W. B. Chaffey, of Mildura, in creating him a C.M.G., is cordially welcomed by all who know and appreciate the work of this big-hearted pioneer. Further, it is an honor to the dried fruit industry, which Mr. Chaffey has so long represented.

He who said, "There is no sentiment in business," forgot that business everywhere is conducted by human beings.

That's why we say "Flowers in an office make a better business day." A cheerful atmosphere makes thinking easier and puts vim into languid muscle. Petals of color, stems of green; the presence of just a few fragrant flowers will make those who come, remain or go, believe that "This is indeed a place where effort is pleasure and work is joy."

THE BRITISH ELECTIONS.

Is Increased Empire Preference Doomed?

Dried Fruit Preference is Likely to be Confirmed.

AT the Economic Conference recently held in London many matters of great importance were considered—defence, naval policy, migration, etc.

But the subject which loomed largest in the eyes of the public was that of Empire preference.

The British Prime Minister (Mr. Baldwin) after ably dealing with many subjects of the first importance then dealt with inter-Imperial trade, and said:

"I am confident that we shall be able to devise measures which will be to our mutual advantage by way of redistribution of our population, improving transport and means of communication, and generally increasing the facilities for the growth of trade within the Empire. The economic conditions of Europe make it essential that we should turn our eyes elsewhere."

Sir Philip Lloyd-Graeme, President of the Board of Trade, said:—

"On our part we shall certainly approach the question of preference with a strong desire to increase our mutual trade, ready and willing to take what action is possible for us and of value to other parts of the Empire to secure that end."

The Australian Prime Minister, Mr. Bruce, made a powerful appeal for the adoption of an effective policy of Empire preference.

After a keen and lengthy discussion, the Economic Conference adopted the recommendations, as set out hereunder:—

Dried Fruits.

Apricots, Prunes, Sultanas, Raisins: Present duty 10/6 per cwt.; preference 1-6th off duty, or 1/9 per cwt.

Currants: 2/- per cwt., preference 1-6th off duty, or 4d. per cwt.

Pears, Peaches, Nectarines, Apple Rings. Present duty free, no preference.

The Conference recommended that in order to make preference effective these duties should be readjusted as follows, and guaranteed by the Imperial Government for a period of ten years:—

Apricots, Prunes, Sultanas, Raisins, Pears, Peaches, Nectarines, Apple rings: Duty, 10/6 per cwt. Preference: Empire grown fruits free. Currants, present duty, 2/- per cwt; preference, Empire-grown Currants free.

Canned Fruits.

The present preference in canned fruits is based on the sugar content of the syrup and averages: Fancy (duty per dozen standard tins): 1/0½, preference 1-6th off duty. Choice (duty per dozen standard tins): 9½d.

Standard (duty per dozen standard tins): 6d.

The Conference recommended, firstly, that basis of duty be altered from sugar content to a level rate on all canned fruits, as such. Duty per dozen standard tins:—Fancy, choice, standard 1/- a dozen; Empire preference, free entry.

Fresh Fruits.

A duty of 5/- per cwt., or 1/8 per case, was recommended on all Apples other than those produced in the Empire.

This measure of preference was endorsed by the British Cabinet.

Mr. Baldwin, however, went still further, and announced a policy of protection for British manufacturers, and appealed to the country.

At the election, Mr. Baldwin has been returned at the head of the strongest party, the Conservatives, but with sadly reduced ranks, and having lost their previous position of being in command of the House by reason of a substantial majority over the other parties combined.

Commenting on the result of the elections, the Australian Prime Minister, Mr. Bruce, has been careful to point out that the vital issue at the election was not Empire preference. It was protection for British industries.

The electors have rejected this latter policy, but Mr. Bruce is of the opinion that Empire preference will still eventuate, as it is not a "party" matter. Further that preference must eventuate one way or another if the Empire and its far flung dominions are to progress as they should.

The Dried Fruit Position.

It should be noted that with regard to dried Apricots, Prunes, Sultanas, Raisins, and Currants, the proposals of the Economic Conference and the British Government would not increase the price to the British consumers. No new duties would be imposed. It would be a revenue adjustment only, and the British revenue would be affected to only a trifling degree by remitting the duties at present charged on the Empire products concerned. It may be said by some that the amount of the deficiency of revenue caused by remitting the present duty on Empire dried fruits will have to be made up by the general taxpayer; this is true, but the amount involved is practically nominal, and in any case, the larger benefit to the old country and the Dominions, by conceding this point, would outweigh any temporary disadvantage.

Officials of the Australian Dried Fruits' Association are emphatic in insisting on the necessity for this tariff preference to be granted. It is of vital importance to the development of our irrigation lands, where so many returned soldiers have been settled.

Furthermore the belief is firmly held that the new Government—of

whatever shade of political thought—will honour the pledge of the Baldwin Government regarding the remission of the present duties on Empire grown fruits.

Fresh Fruits.

With regard to fresh fruits,* this was in the nature of new duties, in which respect it differs from the proposals in respect of dried fruits.

The duty of 5/- per cwt. on all Apples other than those produced in the Empire, would have been of immense value to Canada, the Apples from which country arrive on the English market at the same time as the Apples from U.S.A. In fact, of the Apples imported into the United Kingdom the bulk come from U.S.A. and Canada.

The proposed duty would also have been of great value to Australia—Tasmania in particular—that State sending, by far, the greatest bulk of Apples exported from Australia, and the early shipments often seriously clash with U.S.A. fruit (as was the case last season).

Summary.

However, the matter of new duties on both fresh and canned fruits will receive its consideration in due course at the hands of the British Cabinet and Parliament, but whatever the discussion on these matters may be, there appears to be no doubt of the wisdom of granting the eminently reasonable request for the remission of the duty on Empire dried fruits, as by so doing the Empire dominions will benefit without increasing the burden on the British taxpayer.

Proposed Canned Fruit Tariff.

"Serious Matter for California."

In this matter it is of interest to have the opinion of the U.S.A. producers. With regard to canned fruit, U.S.A. consumes locally about 80 per cent. of its own pack, exporting the balance of 20 per cent. The "Californian Fruit News" states:—

"It will be noted that the British Government's scheme for increasing the preference granted to the Dominions involves the imposition of two new duties, namely: A duty of 10/6 per cwt. on foreign dried fruits, which are not at present dutiable, and a duty of 5/- per cwt. on foreign preserved fruits, which are not now liable to taxation.

The proposals are intended to be Empire-wide in their application. That is to say, they will affect all the Colonies and Protectorates, equally with the great self-governing dominions. This duty, which would amount to about 16c a dozen on No. 2's, would be in addition to the present duty on the sugar contained in canned fruits, which latter now is also a preferential duty—that is, it is not assessed against the colonies. This would be a serious matter to California canners."

OBITUARY.

The Doncaster (Vic.) district recently suffered the loss of another of its pioneers in the person of the esteemed Mr. George Petty.

Mr. Thos. Keck, of Bendigo, son of Hon. Herbert Keck, M.L.C., passed away at the end of November.

SIR JOHN TAVERNER.

Sudden Death at Doncaster.

General regret is felt at the death of Sir John Taverner, which occurred on December 17, when opening a branch of the Primary Producers' Bank at Doncaster, Vic.

Sir John Taverner had a long experience in public life: he entered Parliament in 1889, and had Ministerial office. As Agent-General he ably represented Victoria in London.

Since his return Sir John Taverner has been connected with the fruit export trade, and was at the time of his death a member of the State Fruit Advisory Board. His engaging personality and charm of manner won him many friends, who greatly regret his sudden death. He leaves a widow but no children.

SHOWS TO COME.

New South Wales.

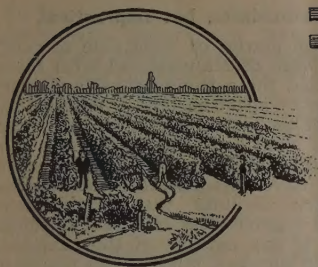
	Jan.
Gosford	25, 26
	Feb.
Yanco	12, 13
Central Cumberland	15, 16
Nepean district	21, 22, 23
	March
Central New England	11, 12, 13
Batlow	18, 19
Crookwell	20, 21
Goulburn	20, 21, 22
	April
Orange	8, 9, 10
Royal Agricultural Soc. of N.S.W.	14 to 23

Victoria.

	March, 1924
Diamond Creek	8
Somerville	12
Ringwood	14 and 15

20,000 Cases of Apples Wanted.—Messrs. Parnham Pty. Ltd., 60 Queen-street, Melbourne, notify by advertisement that they desire to purchase 20,000 cases of Apples for export, and growers interested are invited to write direct to the firm for details.

£2/2/- worth for 3/-. There is no catch in it. Order your copy of the Fruit World Annual at once. It is the most complete practical, scientific, statistical, and commercial review ever published of the fruit industries of Australia and New Zealand. Price 3/- post free from 9 Queen-street, Melbourne, Vic.



Observations on the Dried Fruits Industry in California.

By E. J. Roberts, Irymple (Vic.).

A Paper read at the Annual Conference of the Australian Dried Fruits Association.

AFTER MAKING a considerable investigation into the handling and selling of the dried fruits of California, I have come to the conclusion that while some of their methods are an improvement on ours, and could be followed by us with advantage, some are not as good and others are not practicable at the present time.

Perhaps the first thing that anyone accustomed to the handling of fruit in Australia notices is the enormous tonnages,

approximately 220,000 tons of dried Muscats and Sultanas. The planted area of these vines is well over a quarter of a million acres, a very considerable tonnage of these Grapes are raised fresh to Eastern U.S.A. There are also large areas planted with other varieties of table Grape vines. The railages of fresh Grapes from California are very heavy, often running over 500 car loads per day. Some of the figures are really startling.

Not Without Troubles.

They are not without their troubles in this business; the market sometimes gets glutted, and a large tonnage has to be sacrificed, resulting in growers getting a debit for expenses instead of a cheque. This past season some districts were badly affected with a mildew, and many crops were light. They also have Phylloxera and salt to contend with in many places; it is estimated that between 100,000 and 125,000 acres have been devastated with these dread enemies of the vine-grower.

Many vineyards that were in full vigour when I was there ten years ago, are barren wastes to-day, but for every acre that dies out it seems as if two or three acres are planted in new districts.

The next point is that they have a very large carry-over of dried fruit each year. When I reached Fresno this year, just before the new crop was ready to pick, the

Mr. E. J. Roberts, of Irymple, Vic., is a practical grower and packer of dried fruits, of wide experience.

In his "Observations," published herewith, he deals with many matters, all of which are of great interest, in view of the recent reorganisation of the A.D.F.A. Mr. Roberts gives the comparative Californian experience alongside the Australian method in the various points as they arise in his paper.

The conclusion is definite that the A.D.F.A. should remain a legislative and controlling body, not a trading organisation.

Growers are also urged to take a keen and personal interest in their local affairs and administration, and to intelligently study the progress of the movement as a whole.

The article published herewith is worthy of close and thoughtful perusal.

—Editor.

carry-over of unsold fruit was, as nearly as I could gather, about 100,000 tons. This, of course, does not mean that the local and export sales were only 120,000 tons for the year, but that the carry-over has been increasing for some years past.

Strange to say, about two months before the new crop comes in, they are able, by reduction in prices, to make very considerable sales of this old fruit. As far as I could learn, sales at this carry-over represented some 40,000 tons up to the time the new fruit was delivered to the packing houses. Not only this, but buyers continued to operate largely in this old fruit after new was available, there being a difference of about a halfpenny per lb. in favour of the old fruit. The prices this year are from about 1d. less than last year, and are very much below Australian prices.

Just here I might mention that the bulk of their fruit has not the "body" in it that Australian fruit has—there are many exceptions, of course—but they take the quality and size into account in grading more than we do, and although the most of it is undipped, and therefore all of similar colour, they make more grades than we do. This goes to back up my

arguments at previous Conferences and elsewhere that instead of reducing grades and trying to blend fruit of different appearances, and getting a piebald mixture, we

should increase our grades by adding one or two grades to Sultanas, also at least one to Currants, as I am more than ever convinced that in reducing grades we are on a backward grade, instead of advancing.

Seeded Raisins.

They treat these differently from what I have seen in Australia. They first put them through a hot-air drying process to make the skins adhere to the flesh; they then pass them through boiling water for 20 seconds to loosen the seeds from the flesh, and from there to pass straight to the seeding rollers. They say this process prevents the Raisin from "mashing up." Whether or not this would be any advantage with dipped fruit I cannot say.

Low Prices to U.S.A. Growers.

The price to the grower this season will be very low indeed, and it does not seem as if it can possibly cover the full cost of production. From present indications, the grower will receive only from five to six cents, or say 2½d. to 3d. per lb., for his Sultanas (Thompson's Seedless), and while his cost is somewhat less than in Australia, it means that a man with a ton-per-acre crop will not cover cost of production.

Generally speaking, growers are not feeling very happy. In some districts, however, they seem fairly well satisfied, even with these prices, as the crops there average about two tons per acre. This is on some very deep soil, with particularly good drainage; but it only applies to comparatively small areas. The average of most districts is somewhere about a ton per acre, and these growers are in serious difficulties.

Packing and Selling.

Practically the whole business has been conducted on the principle of the grower selling to the packers. The packers then process and pack the fruit as they get sales for it, excepting a comparatively small quantity that they send on consignment—most of this to export markets.

For this method they claim advantages. In the first place the packing is spread over a long period, and comes out a little cheaper than a

"rush" pack; secondly, it saves the outlay for boxes and packing until the time the fruit is needed, thus effecting a considerable saving in interest.

It might be well for Australian packers to seriously consider this side of the business. If in practice here the fruit kept better loose than packed it would largely get over the difficulty with the trade as far as "life" is concerned.

But the main point in its favour is that the fruit seems to keep very much

better in the sweat boxes

than after it has been through the machines and packed up.

Most of the fruit is dried without dipping, directly out in the sun, either on wooden trays or on sheets of brown paper 3 ft. x 2 ft. In most instances this drying is done in between the rows of vines. I saw very few moths about in the vineyards, which I daresay largely accounts for the keeping quality of the fruit so long after drying, without showing signs of grubs. I saw considerable quantities of it, but very few signs of grubs. Much of this fruit looked just as good as the new seasons fruit.

Very little of their fruit is dipped. I was in quite a number of packing houses, but I saw only one lot, and that had been dipped and sulphured, and was a light amber colour. It had been in the sweat boxes for eleven months, and had kept remarkably well.

* * *

"SUNMAID" RAISIN ASSOCIATION REORGANISED.

WITH REFERENCE TO THE BUYING of the fruit—as you are all probably aware, there has just recently been a reorganisation of the Sunmaid Raisin Growers' Association, and approximately 90 per cent. of the growers signed up to sell all their dried fruit to this Association for a number of years, no price being fixed.

Already there is trouble regarding deliveries in many instances, some growers using various devices to evade their contracts. It is too early yet to say what the ultimate results will be, but it is certainly not too promising for stability. There are already serious complaints at some of the big salaries being paid.

There is a very decided feeling that it is not possible to make all growers see things in just the same way, but that if there could be a satisfactory way found which would allow the growers some choice as to who should handle their fruit, it would remove one of the biggest difficulties that is facing the industry at the present time.

This is where our system appears to be better than theirs.

With the control of the whole of their fruit and finances in the hands of a body many miles away, a few growers in an outlying district get the idea that the business is being worked in the interests of the larger centres nearer home, and that the smaller ones do not get a fair deal. This dissatisfaction soon spreads throughout a small district, and then trouble begins. This seems to have been one of the causes of the recent serious troubles in California.

Control versus Actual Selling.

Quite a number spoken to think that our system of controlling prices, terms and conditions of sale, would be preferable to theirs, of trying to handle the whole business. With a carry-over equal to practically half a year's crop, it is quite essential that many growers get help from someone, and an Association to control the business seems essential. Their present Association seems to give the grower too little freedom, while ours at present has too little control. Something between these two is most likely to give lasting results.

QUALITY DEHYDRATORS

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Consulting Industrial Engineer

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No doubt the finding of that happy medium for either them or us is going to be a difficulty, but a satisfactory solution should not be impossible if each is prepared to look at the other fellow's side of the question and sink his own individual schemes, taking the good points from each one and welding the lot into one harmonious whole. One serious complaint with the Raisin Growers' Association is that it is too costly to administer, also too much money appears to be spent in equipment of the various packing houses.

From various sources one hears of thousands of dollars being spent on new machinery, and then someone else comes along with a new idea, and out this goes, and something else is installed. This goes on continuously at some of their various plants, often to be again scrapped as unsatisfactory.

During the past certain people who were idealists or

enthusiasts, but impractical,

were in power, or were able to carry the Board of Management with them, and had these things done, and a lot of money spent uselessly. Certainly, in looking over some plants and hearing of what had been done, one is convinced that quite as good results could have been obtained for far less money. Results that would have saved a great deal in initial expenditure, to say nothing of the continual loss in interest, labour, and maintenance.

It seems quite plain that there has been a great deal of experimenting carried out at the growers' expense, resulting in heavy yearly interest bill. It is so very easy to go on spending the other fellow's money.

There are plants scattered over a considerable area, and the controlling of these from one centre has proved very costly. As most of you know, these various things culminated in a crisis last year, and the Banks took a hand, and the Association is now under more or less new management, and many of the difficulties are said to be eliminated, and a much tighter grip is held on the finances.

Just before I left I heard of very considerable reduction in the staff in various departments, but the fear is expressed that it is only transient, and that it is a question of time when reversion to the old way will take place.

Another very serious difficulty that the Association has met, and, so far, been unable to effectively check, is the delivery of wet and otherwise unsuitably treated fruit, especially at the outlying centres.

Growers trying to get extra weight resort to various subterfuges to deliver unsatisfactory fruit, feeling that once they have the receipt it does not matter to them. Of course, this is very shortsighted, but it has caused a great deal of bad feeling, as those growers who are always careful and only deliver fruit in good condition complain that they suffer from the duplicity and cupidity of these others. I was informed that this was causing a lot of trouble in the Association, or, rather, among the members. This is a trouble that we are all more or less acquainted with. They find it worst in the outlying districts.

After all my investigations and much thought, I feel certain that our successful future does not lie in the A.D.F.A. becoming a large trading concern, buying, processing and selling the fruit, and financing growers, but in improving and amplifying our present methods in such a way as to inspire the confidence of the growers as a whole.

The lack of this in the past has been the main cause of unrest at the present time.

To launch out into a huge trading concern with government from one centre is not going to allay this unrest, nor give that confidence to growers in the outlying districts that is so essential to success, and further, it will prove very expensive to the growers.

To get the confidence of the growers the Association should

give more publicity

to its workings, and all parties should try to get closer together instead of forming cliques and trying to make points against each other.

Growers should show more interest, and attend the meetings that are called instead of staying away, and then complaining that they have no say in their own business.

Many growers should also take more care in the drying of their fruit, and see that it is properly cured, instead of trying to see just how wet they can manage to get it past the weigher-in.

Packers generally should be more careful in the processing of the fruit.



Drying grapes on racks in a Mildura Vineyard. note dip in background.

The Association insists that its rules are carried out by packers, agent and merchants. Particular care should be taken by the Association to foster confidence in its dealings with all parties. After that growers should be left as much freedom as possible as to how and by whom their fruit should be handled, so long as the rules of the Association are fully complied with.

Most men feel that they should have some choice in these matters; when this is taken from them someone is probably going to meet trouble. The most important thing in the whole business seems to be the getting and keeping the confidence of the growers as a whole, and I trust that the members of the A.D.F.A. will each use their very best endeavours to this end.

(To be continued.)

Dehydration of Fruit and Vegetables.

An Important Adjunct to the Industry.

The Subject Reviewed from a Tasmanian Standpoint.

By P. H. Thomas, Government Fruit Expert.

THE DEHYDRATION OF FRUITS is a subject that few fruit-growers in Tasmania have fully considered. Of late years extensive plantings of Apricots, Prunes, Pears, etc., have been made in different districts, with the primary object of utilising the crops for either jam, preserves, or canning.

It is doubtful whether the fresh fruit markets, canneries, and jam manufacturers will be able to absorb all the products of these areas, and the question arises whether a portion could not be put up in the dried form.

The principal item in jam manufacture at the present day is the high

a brief explanatory paragraph will be opportune.

"Drier."—This is applicable to any machine which is used for the ordinary drying of an article, such as a 'hop drier,' 'herb drier,' etc.

Evaporator.—A drying machine used for fruit, vegetables, etc., which does not permit an accurate control of temperature or humidity.

Dehydrator.—A drying machine with forced draft in which the temperature, relative humidity, and air velocity can be accurately controlled.

The first dehydrator to be installed in Tasmania was erected at Bridgewater, and is intended primarily to treat Apricots and Prunes.

The principle of the plant is very simple:—The cabinet that holds the fruit is of a square tunnel shape, the walls of which are fitted with roller bearings to facilitate the loading and handling of trays of fruit.

At one end is the heating apparatus, with regulated vents to control the humidity and temperature. At the other a suction fan operates, which draws the warm air through the stacked trays of fruit, expels the moisture, etc., and returns the warm air along a flue that runs over the top of the cabinet, so that it can again be used.

Preparation of Fruits.—Prunes are generally dipped in lye before dehydration, although in some cases steaming is resorted to instead, and is said to produce a fuller and better coloured **Prune**. The latter system is also preferred in treating **Cherries**.

Apricots, Peaches, Pears, and Nectarines are generally "pitted" by hand before treating. They are split in half, and the stones or seeds removed. In order to retain the natural colour of the fruits, and to give an even tone to the dried product, they are then exposed to the fumes of burning sulphur for varying periods.

Temperature and Humidity.—These are important factors, and have a great governing influence on the quality of the product. The temperature of air used in dehydration either shortens or lengthens the time required for drying.

In order to maintain the maximum output at the lowest cost, it is necessary to use the highest temperature that will not injure the product.

The great danger lies toward the completion of the drying, i.e., when

cost of sugar, and it is improbable that such a reduction in cost will occur as to give the consumer a much cheaper article.

Canning and preserving form big outlets for most fruits, and are rapidly becoming popular where the article can be obtained without having to carry the impost of long freights or cartage. In each of these methods of processing, the matter of "bulk" is a big item, and a severe handicap in forwarding the products over long distances.

It is here that the manufacturer of dried fruits has a distinct advantage. Approximately seven pounds of fresh fruit will give one pound of dried fruit.

A good deal of confusion has at times been in evidence as to the differences between the terms "drier," "evaporator," and "dehydrator," so

the fruit is almost dry. Unless the air current has a relatively high humidity a number of undesirable changes in colour and quality may take place. Different temperatures are used for the various fruits treated, and may range from 145 degs. to 175 degs. F.

The time of drying varies according to the kind of fruit that is to be processed. Apples at a temperature of 165 degs. F. will require approximately eight hours. Apricots at the same temperature about 12 hours, whilst Pears often require as long as 16 hours.

Methods of dehydration have improved greatly in the last few years, and it is contended that with proper handling fruits may be treated so that they are equal, or even superior, to the sun-dried article.

There is opportunity and room for development in Tasmania in the matter of dehydrating certain fruits and vegetables, especially where cheap power is available.

The fruitgrower must be fully alive, and take advantage of every avenue that will enable him to place a good product on the world's markets.

The dehydrator should be a valuable asset to the orchardist, especially in view of the increased production that is certain in the near future.

DRIED FRUIT NOTES.

Mr. W. P. Caro, late of Gollin & Co., has been appointed manager for the United Kingdom of the A.D.F.A. He expects to leave for London by the "Narkunda" about January 8th. Mr. Caro has been continuously in touch with the dried fruits industry, particularly the marketing problems, for the past 20 years. The present critical condition of the industry, and the national importance of same have influenced him in accepting the position which he has, at much personal sacrifice.

Messrs. L. T. Pearce (Birdwood-ton), and W. H. Edmunds (Red Cliffs) have been appointed organisers to the A.D.F.A. They will visit all the dried fruit centres of the Commonwealth, address meetings in regard to the activities of the Association, and endeavor to induce members outside the organisation to join up. The first districts visited were the Murrumbidgee Irrigation Areas, N.S.W.

Applications are being called for the position of General Manager of the A.D.F.A., closing date January 14th.

The present prospects are for a good crop of dried fruits for 1924, with the exception of Apricots, which will be light. So far the weather has not affected the vines.

Passion Fruit Culture

SOIL : LOCATION : PLANTING : TRELLISING : MANURING

By W. J. ALLEN, N.S.W. Government Fruit Expert

THE PASSION-FRUIT does well in many of the coastal districts of New South Wales, and also forms an important part of orchard operations in some of the young citrus orchards of the County of Cumberland, Penang Mountain, and the Gosford district, where it is frequently planted among the trees. As it begins to bear very early, growers are enabled to make considerably more from this crop than pays for the working of the orchard until the young trees begin to produce crops of fruit, which they usually do after the fourth or fifth year.

Generally speaking, the vines are most productive before having attained to four or five years of age. After that period they begin to lose vigour and gradually die out, or cease to be very profitable, and are in consequence removed. The trellis and wires which were used for their support are removed from among the trees, and in many instances are used for a similar purpose in a new portion of the orchard which the grower may be planting out.

The Passion-vine is found to thrive well on many classes of soil—some so poor that one is led to wonder how anything could be grown profitably on it. On the light sandstone and poorer coastal country there is no other fruit which will give the same return as this, and with proper working and heavy manuring, it is wonderful the amount of fruit that can be taken from an acre of vines.

As an addition to a fruit salad there is no flavour that can surpass it, and when eaten with cream it rivals the most delicious of Strawberries. If this fruit were known in Great Britain and America, I venture to say that there would be an unlimited demand for it, if once we were successful in landing it in those countries in large quantities.

Some few years back a few cases of Passion-fruit were packed and exported to London. They arrived in good condition, but somewhat shrivelled, and, in consequence, were sold at a very low price when put up at auction. The trade did not know the fruit, and imagined them worthless, owing to their shrivelled appearance. Later on, however, a gentleman from Australia saw them and introduced them among some of his friends, who thereupon bought them readily at a high price per dozen. However, at the present time the supply is not equal to the demand, and in my opinion if twice the quantity were

grown it would command good prices.

The chief feature about the Passion-vine, however, is its habit of producing two crops per annum.

The summer crop comes in about February or March, when the market is usually well supplied with other fruits, and prices are necessarily low.

The winter crop is ready for pulling when other fruits are not so plentiful on the market. The practice of the growers has, therefore, been to secure a heavy winter crop by pruning away the summer crop when about half-grown; or, generally speaking, about the month of November. This stimulates the vines to throw out fresh fruiting laterals for the winter.

Location of Passion Vineyard.

In selecting a site for the planting of Passion-fruit, one of the important points to keep in view is to avoid a district or situation where frosts are at all severe or of frequent occurrence in the winter; there is one thing which this vine will not stand, and that is severe frosts. The Easter, winter, and spring crops are those which are in most demand, and there is a splendid market for all well-grown fruit.

It is during part of this time that we have our coldest weather, and a severe frost or two would destroy the whole crop, and in all probability kill the vine back to the root.

The next point of importance is to put the land in thorough order before planting, and in places where it is very sour and deficient in lime, which it mostly is on our coastal country where the Passion-fruit is grown, it would be advantageous to give the land at least half a ton of good lime to the acre.

Planting.

The vines should be planted out about September, when the ground is in good condition.

In raising or purchasing young plants, either secure the seed from the very best fruit which has been raised on good, strong, healthy vines, or buy plants from a reliable person who has been most careful in his selection. In this way, starting the vineyard with plants which might perchance have any hereditary weakness, will be avoided as far as possible.

The seed is sown in February. The rows should be 30 inches to 3 feet apart, and the seed every inch or so in the row, afterwards thinning out to 3 inches apart to make good stocky plants. One half-case of

fruit dealt with in this way is sufficient for planting several acres.

The trellis on which the vines are to depend for support, might with advantage be erected just before the vines are planted, as by so doing, the poles or stakes up which the vines are to climb until they are firmly fixed to the wires overhead, can be placed in the hole in which the vine is planted, and the top of same secured to the wire.

In erecting the trellis, the posts should be 6 feet 6 inches long, firmly set to a depth in the ground of 18 inches, and placed at distances of about 24 feet apart, or at furthest 32 feet in the row. On the tops of these posts two strong No. 8 galvanised-iron wires are tightly stretched, at a distance of 6 inches apart.

The rows should run north and south, so that the plants get sunlight on both sides. The rows are placed in the centre of the tree rows, or when alone, 10 feet apart, with the vines every 12 feet in the row; thus about 363 plants are required to the acre.

The young vine is trained with a single stem up the stake until it reaches the wires, when it is allowed to throw out from two to four leaders, which are trained to run either way on the wires.

As the vine puts forth further growth, the main leaders and laterals are trained along the wires.

Manuring.

Without judicious manuring there are very few districts where the growing of this fruit would prove highly satisfactory, while, on the other hand, those growers who are giving the most attention to this important adjunct, are the ones who are making the greatest profits out of the industry.

It has become a recognised fact that

liberal dressings of manure

must be used from the time of planting until the plants cease to be productive. Generally speaking, the stronger and more vigorous the vine the sooner it begins bearing, the better are the crops, the longer the life of the vine, and naturally the plant will be more healthy than if poorly nourished.

On making inquiry among the different growers, I found that scarcely any two of them were using the same mixture. Some, on the lighter soils, were using considerable quantities of blood and bone with a little potash; others were using bone, superphosphate, and potash; while others were using a mixture of nitrate of soda, dried blood, superphosphate and sulphate of potash, etc., etc.; and judging from the appearance of the different vines, all with very gratifying results.

The following mixtures are suggested, but it is of first importance that the orchardist bear in mind that they are only suggestive—they are not intended to be absolute, either as

to the proportions in which the various fertilisers are brought together, or as to the quantity to be applied to each vine.

The practical man will find with a little experience that his soil contains sufficient of certain forms of plant food, or requires less of something than is suggested in the following mixtures; or he may, by a little experimenting, find that he requires to supply less or more in a readily available form—perhaps, indeed, less or more in a slow-acting form.

It is simply impossible to suggest mixtures that are useful to all conditions, or even to the great bulk, and all that can be said about the following is to warn growers that those who would use fertilisers to the maximum advantage will conduct a few simple tests before committing themselves finally to anything as "suited their land":—

Sulphate of ammonia	616 lb.
Superphosphate	336 lb.
Sulphate of potash	168 lb.

Use about 4 lb. per vine.

Alternative mixture, using a proportion of blood and bone—

Superphosphate	168 lb.
Blood and bone	189 lb.
Sulphate of ammonia	566 lb.
Sulphate of potash	168 lb.

Use 4 lb. of this mixture.

Alternative mixture, using a larger proportion of blood and bone—

Superphosphate	112 lb.
Blood and bone	252 lb.
Sulphate of ammonia	549 lb.
Sulphate of potash	168 lb.

Use 4 lb. of this mixture.

Grading and Packing.

When the fruit begins to ripen it should be picked at least twice a week. It will keep well in a cool, dry place, but I would recommend marketing every week.

All badly formed and inferior fruit should be discarded; the better fruit is mostly packed in layers, so that when opened at the markets it presents a good appearance. In grading, colour as well as size is taken into



Apple Packing Instructional Class, as conducted by the Tasmanian Department of Agriculture.—A splendid movement.
"Illustrated Tasmanian Mail" photo.

The following alternative mixtures have some of the phosphoric acid and nitrogen supplied in the slower-acting forms of bonedust or blood and bone, while the quantities of superphosphate and sulphate of ammonia have been reduced:—

Alternative mixture, using a proportion of bonedust—

Superphosphate	168 lb.
Bonedust	127 lb.
Sulphate of ammonia	593 lb.
Sulphate of potash	168 lb.

Use 3½ lb. of this mixture.

Alternative mixture, using a larger proportion of bonedust—

Superphosphate	112 lb.
Bonedust	170 lb.
Sulphate of ammonia	585 lb.
Sulphate of potash	168 lb.

Use 3½ lb. of this mixture.

consideration, any badly coloured fruits being sorted out and packed separately.

The quality of the Passion-fruit grown in this State is all that can be desired.

Passion-fruit Pulp.

A market has opened up in recent years for Passion-fruit pulp, and in certain districts a large quantity is treated annually.

For this purpose the fruit requires to be ripe and sweet. Remove the pulp, and place it in tins; solder down the lids, and exhaust for five minutes in boiling water; then solder up the hole in the lid, and reboil for twenty minutes, remove, and allow it to cool. About 2 lb. of Passion-fruit are required to make 1 lb. of pulp.

WOODINESS OF PASSION-FRUIT.

Causes and Control.

Woodiness or "bullet," of Passion-fruit is an abnormal condition of growth that is mainly manifested in the fruit itself (writes the "N.S.W. Agricultural Gazette"). It is commonly observed on fruits after they are about half-grown, and most frequently on old vines; but the condition occurs on young vines and in the fruit at all stages of growth. Instead of the production of rind or skin of normal texture, certain portions become thickened and hardened. This is sometimes accompanied by a certain amount of cracking and scalliness of the outer layers. In such fruits there is a notable reduction in the amount of seed, very few, if any, mature seeds being produced in the region of the bullet or woody tissue.

On vines bearing much fruit in this condition the leaves are frequently smaller than normal leaves, and are usually more tough and wrinkled.

Non-parasitic organism has been associated with the disease, but it appears that the condition may be brought about by a number of physical or physiological factors. The following are some of the main features of its occurrence:—

1. There is a certain amount of varietal apparent resistance among vines. Some plants may not develop bullet for several years, while others under the same conditions become woody in the first season.

2. The age of the vine is important, the condition being most commonly developed in vines 3 to 4 years old. Older vines are practically worthless, as far as the production of saleable fruit is concerned.

3. Vines grown (a) on poor soils; (b) on soils which are subject to dry spells; (c) in localities which are liable to frosts at time of flowering, usually develop the condition very quickly.

With the present methods of culture, a large proportion of bullet is generally associated with the winter crop.

There are no control measures which are completely satisfactory, but the adoption of the following suggestions will keep the percentage of woody fruit at a minimum:—

1. Plant only vines raised from fruits which have been grown on vines free from bullet.

2. Add fertilisers to the soil where necessary. A complete manure is often advisable, i.e., one which contains phosphates, nitrates and potash.

3. Add humus (vegetable matter, stable manure, etc.) to improve soil texture and water-holding capacity; stir surface soil to form a soil mulch which will conserve moisture during dry spells.

4. Avoid pruning at a time which will promote blossoming during periods of frost.

Queensland

The much discussed "Fruit Marketing Organisation Act" in Queensland.—A Summary of its Provisions.

SEASONABLE NOTES.

At a representative conference of fruitgrowers recently held in Queensland, resolutions were adopted requesting legislation designed to assist in a more organised and concentrated system of selling fruit.

A summary of the resolutions was published in the "Fruit World" of 1923.

The Bill was duly drafted, and is now law. The following is a summary:—

The name is **The Fruit Marketing Organisation Act of 1923.**

After giving definitions of certain terms, etc., the Act proceeds—"There shall be established . . . an organisation for the marketing of Queensland fruit . . . consisting of (a) local associations, (b) sectional group committees, (c) the Committee of Direction.

The last-named is incorporated as "The Committee of Direction of Fruit Marketing," with an official seal, and is capable of suing and being sued.

This Committee has power "to purchase, sell, or exchange, lease, and hold land, goods, chattels, securities and any other property whatsoever, and may appoint agents, enter into contracts, issue debentures (on terms approved by the Council of Agriculture), etc.

From 1st January, 1924, the Committee takes control of the marketing of all fruit, and thereafter all fruit shall be tendered for sale, transported by rail, or handled at water front, railways, markets, shops and barrows in Queensland under the authority of the Committee of Direction.

The Committee has full power to make any exemption considered to be advisable.

The powers of the Committee include:—

- (1) Requiring the co-operation of local associations, with a view to having one channel of receipt and despatch at station, siding, or outport.

- (2) Encouraging packing sheds; and establishing a system of inspection of fruit.

- (3) Arranging for transport, cartage and handling.

- (4) Supervision at markets.

- (5) Making agreements with fruit commission agents, fruit canners, etc.

- (6) Taking preliminary steps for extension of markets.

- (7) Prohibiting or regulating the use and management of fruit barrows, fruit stalls at railway stations, and fruitgrowers' retail shops.

- (8) Entering into agreements and contracts: engaging and paying employees.

- (9) Imposing levies on fruit marketed.

- (10) Arranging for financing local associations and sectional group committees.

- (11) Engaging in such other activities approved by Governor-in-Council on the recommendation of the Council of Agriculture.

The structure of the organisation is (1) The unit or district Association of growers. (2) The sectional group, viz., Banana, Pineapple, Deciduous, Citrus, and other. Each sectional Committee is to appoint its representatives on the Committee of Direction.

Local Associations are to have as their common object the preparation, packing, grading and inspection of fruit for market.

Any person who obstructs, or impedes the Committee of Direction in exercising any of its functions or authorities shall be subject to such penalty as may be prescribed.

Regulations are to be made to provide for the fees, allowances, and travelling expenses of the members of the Committee of Direction and sectional group committees, and for the general conduct of the organisation.

The Committee of Direction is empowered to make levies to defray all expenses under the Act and to provide methods for collection of fines or levies, including the recovery of such levies from persons holding moneys to the credit of the growers.

A fine of £20 may be imposed for non-payment of levies by growers or persons holding money to the credit of growers.

The regulations may provide for the standardisation of agents' accountancy methods.

Persons committing a breach of the Act are liable to a penalty of £50. Penalties to be recovered by complaint in a summary way under the Justices Act 1886 to 1909.

Duration of Act.—The Act is to remain in force for three years, and thereafter by Order-in-Council for another three years "unless on the requisition of 500 registered fruitgrowers a ballot on the question of continuance be requested," and on taking such ballot a majority of registered growers demand discontinuance.

Provisional Committee.

Until the Committee of Direction is elected, a Provisional Committee has been appointed: the names are as follows:—

Banana Growers: W. A. Cathcart, Landsborough; and W. B. Christie, Currumbin.

Pineapple Growers: H. Vinnicombe, Glasshouse Mountain; J. J. Thomas, Montville.

Citrus Growers: T. H. Brown, Montville; L. G. Swain, Flaxton, via Palmwoods.

Deciduous: J. S. Mehan, Stanthorpe; David Pfrunder, Applethorpe.

Other Fruitgrowers: H. Archibald, Pozieres, via Cotton Vale.

Council of Agriculture: L. R. McGregor, Director, Queensland Producers' Association, Council of Agriculture, Brisbane.

QUEENSLAND MARKETING ORGANISATION.

Notes and Comments.

Fruitgrowers in Queensland have adopted a unique method for organising their industry.

For the first time in the history of Australia and New Zealand the entire fruit industry of one State has been brought under the control of an Act of Parliament.

The Orchard Tax Act of New Zealand, providing for the compulsory contribution by growers of 1/- per acre, was considered a bold step. The Act was for five years, when it automatically expired, and had to be re-enacted if the growers desired it. The success of the organisation created by the funds thus compulsorily raised was sufficiently satisfactory to warrant a re-enactment of the measure for a further five years.

The "Fruit Marketing Organisation Act" of Queensland goes much further; in fact, it gives absolute control of the industry to the Committee elected by the growers.

Its authority is for three years, and for a further term of three years unless opposed by sufficient growers.

The progress of this Committee and the work of the organisation generally will be followed with the keenest interest by fruitgrowers and other producers throughout Australia and New Zealand.

Readers are invited to carefully study the summary of the provisions of this new Act of Parliament. Copies of the Act are obtainable on payment of a small fee from the Government Printer, Brisbane, Q.

* * *

CONFLICTING VIEWS.

The Editor of the "Fruit World" desires to acknowledge the receipt of letters from various centres, some criticising the article by a correspondent in our November issue, others cordially commending it.

In reply to a suggestion from one critic, may we state—if it be necessary to do so—that we have no connection "with any campaign conducted by biased city interests."

The "Fruit World" has proved a loyal friend to growers for the past twenty-four years, and has been the means of widening markets here and abroad, repealing oppressive legislation, and instructing growers in the better cultural methods, and has won, not only the support, but the goodwill and affection of growers in the fulfilment of its mission to adequately represent a big and increasingly important primary industry.

If the "Fruit World" did nothing else but win back the City of Melbourne trade from the foolish early closing restrictions, it would not have existed in vain. In that work alone a market worth £40,000 per annum was saved for growers, in which the growers of Queensland now share the benefits.

The legislation against which the "Fruit World" fought was that introduced by those outside the industry.

In the present instance it is the growers themselves who have asked for legislation.

But now that the Act is in force, there are protests from several centres, and requests for ballot before the Act becomes operative.

Protest at Montville.

At Montville on November 29, a meeting, attended by 70 growers, was held. Mr. W. H. Harvey presided. A telegram was read from Mr. L. R. Macgregor, Director of the Council of Agriculture, requesting that the meeting be adjourned to December 6, to enable him attend. A resolution was carried "that the meeting proceed."

After a vigorous discussion, a resolution was carried, on the motion of Messrs. R. N. Ross and W. Vining—"That this meeting of Montville fruitgrowers, representing practically all the growers in the district, regards the passing of the Fruit Marketing Organisation Act, without affording those who came under its operations, the opportunity of a ballot, as repugnant to democratic principles, and a denial of common right; wherefore we strongly represent to the Minister for Agriculture the urgent desirability of so amending the Act that those affected by its operations may exercise their individual right of affirmation or veto before any steps are taken to administer it."

It was further decided to convey this resolution to the Minister of Agriculture.

Protests have also been made at Aspley, Woombye, Palmwoods and Buderim Mountain.

Speaking at Aspley Mr. W. Ellison manager of the Southern Queensland Fruit Society, and Associate Member of the Fruit Committee of the Council of Agriculture, in urging the necessity for better organisation said the various Governments throughout Australia were responsible for the present glut of fruits: they had rushed returned soldiers into fruit growing, with the result that they were now producing more fruit than they could consume.

A largely-signed petition has been circulated in Palmwoods, requesting the taking of a ballot before putting the new Act into operation.

* * *

At a meeting held at Ballandean on November 24, Mr. C. Day presiding, between 50 and 60 growers attended from Ballandean, Stanthorpe, Glen Aplin, Fletcher Lyra, Wyberba and Eukey. A resolution was adopted requesting that the new Act be not put into operation until the will of the growers had been ascertained by ballot.

QUEENSLAND.

Successful Fruit Fly Lure.

Fruit Marketing Act is in Force, but No Ballot was Taken.

(By Our Correspondent.)

EARLY SUMMER FRUITS are becoming fairly plentiful on Brisbane markets, and the coastal product is well up to the standard, particularly Grapes and Peaches.

The cultivation of the latter on the coast, where the China and Indian types grow vigorously, and fruit profusely, has been restricted on account of the uncertainty what percentage would be marketable after the fruit fly had exacted its toll.

As a result of some ten years' study and experimenting, a local enthusiast, Mr. A. W. Harvey, has perfected a lure

which has been satisfactorily demonstrated this season, will attract the female fly to destruction prior to depositing her eggs.

Traps containing the lure have been responsible, where placed throughout Peach orchards, for the fruit maturing free from infestation, whilst in others almost adjoining, barely a sound fruit is to be found.

Exceptionally fine Peaches, and a limited range of Plums, can be produced in profusion in suburban areas. In fact, the former, though deficient in keeping qualities, are a decided improvement on the quality available at any season from the temperate area.

The discovery and perfecting of the fly lure will mean a large expansion in planting, and the assurance of a plentiful supply of fruit during the last quarter of the year, when, previously, it has been at a premium.

A desire to be early in the field is probably responsible for the grossly immature stage characteristic of many consignments received from Stanthorpe district. Stone fruits, not having completed the stoning period—(Peaches half-grown and absolutely poisonous)—and Apples, from which one could almost hear the petals falling, are a poor advertisement for the district. Severe indictments have been published in the metropolitan press on the matter. Regulations covering the size, brands, etc., of fruit cases under a special Fruit Cases Act indicate a start having been made at the wrong end. The contents could well be expected to receive first consideration.

Excessive heat and a succession of thunderstorms over restricted areas have developed rapid growth of both trees and crops in many districts, but in others, conditions are unpromising.

The scourge of citrus orchards on Blackall Range—the bronze orange bug—is still very much in evidence.

The matter of dealing with the pest was played with until the season was too far advanced for growers to apply timely remedies, following upon official experiments.

It is, however, creditable to the experimentalist and his assistant that the few trees treated by them on one method—cyaniding and subsequently bandaging tree trunks with fly paper to prevent the re-ascent of any bugs not destroyed by the cyanide gas—are the only specimens in the locality absolutely free from the pest. The necessity for united action is now presenting itself by the insects attaining the flying stage.

Unfortunately procrastination has been a prominent feature in departmental procedure, though the efforts of the Chief Instructor have gone a long way in so far as his authority extended in evolving order and expedition out of complete chaos.

Mr. Ward's acceptance of a more lucrative Victorian appointment is a distinct loss to the Department, and the industry generally. Expressions of regret at his departure are most profuse from all branches of the industry, wherein it is most obvious that unless the position is filled in the meantime—official indications point to the abolition of the office of Chief Instructor—the previous characteristic of excessive and irrelevant verbosity with attempts at everything, and the completion of nothing are inevitable.

On January 1st, 1924, power is vested under the "Fruit Marketing Act" to control the marketing of all Queensland fruit. It has been decided to assume control of the summer crop of Pineapples, including all cannery supplies.

The office of manager under the Act has fallen to Mr. W. Ranger, of Eukey, near Stanthorpe. The appointment is a popular one. Since his arrival in this State Mr. Ranger has

demonstrated not only how to conduct an orchard on modern lines, but also that the temperate branch of the fruit industry, if thoroughly organised, could take a dominant position.

That the remarks submitted re the Agricultural Council, as applied to the Fruit Marketing Bill, should be obnoxious to some of your readers, is regretted, and apology is submitted in respect thereof.

This, however, does not alter the fact the measure is entirely coercive, the proposed ballot not eventuating. Had it been taken, there would not have been occasion for protests emanating from meetings in several of the principal and most prosperous fruit areas. Significance is attached to the resignation of Mr. J. D. Story, and his reported objection to State trading has not improved the position.

The occasion for legislation may be admitted, but the coercive aspect is certainly not. That a majority of growers favour the Act is based on the assumption that their representatives accepted it in its present form without fully referring to their Associations. The laudations of those who conducted last season's Tomato pool suggested a ballot being entirely superfluous. Still, when taken, the ayes fell far short of the requisite number.

BRISBANE FRUIT TRADE.

Lower Freights Required.

The views of the Brisbane Committee of Agents with regard to direct freights from Hobart to Brisbane are contained in the following information supplied by Mr. A. E. Chave, Secretary to that Committee, under date October 14. [We regret the letter was not published sooner.—Ed. "F.W."]

"The growing importance of Brisbane as a market for Tasmanian fruit is now recognised by all those interested in the trade. From the comparatively small quantities of Apples that a few years ago were sufficient to supply our requirements, our consumption of fruit has increased to very large proportions. Our imports from Tasmania alone last year amounted to 265,000 cases, and this year's shipments for the corresponding period show a large increase of these figures. Regular shippers to Brisbane express themselves as fully satisfied with the prices obtained for their fruit, but complain generally of the heavy charges and freight incurred on shipments sent to this market.

"The selected Committee of Agents in Brisbane recognise that it is in this direction that our market is heavily handicapped, and intend by their influence and by agitation, to support the efforts being carried on by the growers of Tasmania, to do their utmost to secure a reduction of freights

on the fruit carried here by the direct boats.

"While recognising that the direct boats have been the means of increasing the importance of our market by landing fruit here in a far better condition than by the old transhipment methods, and thereby enabling consumers to procure a far better article than before, we contend that the present rate of freight, 2/6 per case, from Hobart to Brisbane, as compared with 11d., Hobart to Sydney, is excessive and out of all proportion.

"It is a curious fact that fruit consigned from Hobart to an agent in Sydney, and then transhipped to Brisbane, can be delivered here at a saving of 5d. per case, as compared with shipments carried by the direct boat, the freight, as previously pointed out, being 2/6 by direct boat and 11d. and 1/2, a total of 2/1 by the former method. This disparity is a serious handicap, both to the grower and a drawback to further popularising our market.

"To quote a further instance, fruit shipped from Hobart to Sydney, and reconsigned to the large inland towns of Queensland, such as Toowoomba and Rockhampton by rail reaches its destination at a lower rate than if carried by direct boat to Brisbane, and forwarded on from this port to the towns mentioned.

"In the face of these facts it is very evident, that something is radically wrong; by all methods of common-sense reasoning it is surely a logical conclusion that a direct boat should at the least be able to land fruit as cheaply, if not cheaper, than by transhipping methods. We recognise that for this season reduction can hardly be expected, but a combined effort by growers and agents should be made to have the direct freight from Hobart to Brisbane, substantially reduced, for the 1924 season.

"The latest information states that one of the interstate companies announce a reduction on freight between Melbourne and Brisbane of 10 per cent., which further accentuates the position as far as comparison with Hobart and Brisbane is concerned.

"We trust that the shipping companies concerned will see the justice of our claim, and act accordingly."

Montville.

Mr. W. H. Harvey. Montville (Q.), writes (4/12/23):—

The principal fruits grown in this district are citrus, Pineapples and Bananas.

The season's prospects are: Oranges, light to medium. Mandarins, all varieties, heavy in most places. Pineapples, good crop. Bananas, good generally.

Last season's citrus crop was good generally. The trees made good showing this season, with every promise of good crops, but dry spell at setting time reduced this year's crop considerably.

A Blight-proof Pear

IMPORTANT DISCOVERY IN U.S.A.

"PROVEN BEYOND DOUBT TO BE IMMUNE"

FRUITGROWERS throughout New Zealand and Australia will be greatly interested in the fact that after careful investigation a choice heavy-bearing Pear has been discovered which has been proven to be immune from the dreaded Pear Blight, or Fire Blight (*Bacillus amylovorus*). This is known as Rimes' Blight-Proof Pineapple Pear.

During the last 20 or 25 years there has been no advance in American Pear culture, states Mr. R. D. Rimes in "Better Fruit." No more fruit is being produced now than was grown at the beginning of the present century. Other fruit industries have made great increases in production, but Pear-growing has been at a standstill. This condition is due almost entirely to Pear Blight. Every year this disease has taken its toll of Pear trees, and the new plantings from year to year have not more than kept pace with the losses. This bacterial disease cannot be controlled by spraying, and the only treatment that has helped much in the staying of the progress of the disease is rigidly to prune and cut out the infected parts. This sometimes means the pruning away of the major portion of the tree.

It was recognised long ago that the real solution to the difficulty lay in the securing of a variety of Pears, resistant to this disease. Some time ago, one of our foremost authorities on Pears, Prof. U. P. Hedrick, vice-director and chief in research, division of horticulture, New York Agricultural Experiment Station, said: "About the most important discovery to be made in pomology, is a race of blight-resistant Pears."

Leading horticulturists and pomologists have been striving for years to produce a Pear of good quality, that would be immune from blight, and this is what I hold has been discovered in Rimes' Blight-proof Pineapple Pear.

This Pear has recently been introduced by the Altamaha Nurseries, the introducers of this variety, to Pear growers and state experiment stations in 38 States, and as far north as British Columbia, where it is reported to be doing very well.

I believe this variety brings back to those sections of the country an industry that was ruined years ago, due to the fact that we did not then have a variety of Pears that would resist the blight. That is the opinion I have formed. There are a number of reasons, but I would especially mention its hardiness and its productivity.

It bears so heavily that quite often a dozen props are necessary to prevent the limbs of a ten-year-old tree from breaking down with the load of fruit during the ripening period. It is a variety that has proven to be one of the best yet discovered for canning.

As a shipping Pear, it is very doubtful if the Pineapple has an equal, keeping for a long time after being harvested, in perfect condition, even after fully matured. From the point of view of early bearing, the tree is remarkable, as it commences to bear when it is three years of age, and I have had several instances reported to me of the first fruit appearing at two years of age. It is very regular in production of heavy crops of fruit.

The fruit is extremely handsome, being large in size, and individual specimens often weigh as much as twenty ounces. The fruit is a golden yellow, spotted with conspicuous small brown specks. Its aroma is remarkable, having a very distinct Pineapple odor, while the flesh is tender, juicy and luscious, with a rich, sweet aromatic flavor.

The Altamaha Nurseries exhibited Rimes' Blight-proof Pineapple Pear last December at the Third Annual Fruit Show, at Berkeley, Cal., winning first prize.

The old original parent tree, now 43 years old, is to-day in a vigorous and flourishing condition, and produces annually a big crop of beautiful Pears. During all these years it has grown close to other varieties—as close as 60 feet to Le-Conte, Kieffer and others—and while these varieties have blighted very badly, the old Pineapple Pear tree has never shown any indications of blight. There are several places here where the Pineapple Pear trees, of all ages, are growing in close proximity to other varieties that are badly infected with the blight, but maintain their complete resistance to the ravages of this disease.

For a number of years the Pineapple Pear trees have been tested to determine their non-susceptibility to blight. They have had budded and grafted into them the blighting wood from other varieties, and they have been tested many times by inoculating them with pure Pear-blight cultures, but in every instance they came through unscathed.

The director of our State Experiment Station says: "We have not been able to blight it either naturally or artificially, and for orchard on any

scale, it may be considered immune to blight."

The trees are rapid, strong growers. The fact that the parent tree is now 43 years of age indicates that they will be of permanent value in our plantings. The variety blooms early and on that account should be a good pollinizer for some of the other early bloomers. Here in Georgia the fruit commences to ripen about August 1 (1st February in Australia). To the north and west its period of maturity would, of course, be later than this. Trees here ten years old have produced 18 bushels, while some of the oldest trees have yielded as high as 66 bushels to the tree.

WESTERN AUSTRALIA.

Mullalyup.

J. Hawter, Blackwood Orchards, Mullalyup, reports (27/11/23):—

The principal fruits grown here are Apples, Pears, and stone fruits. Coming season prospects are very light. Last season's crops were generally good.

Apples.—Yates, Jon., Delicious, Chandler (very light), Cleo. (fair).

Pears.—Vicar, Kieffer, Comice, W. Nelis, W. Cole, Packham (very poor), Bartlett (medium to good).

English Plums and Prunes, fair. **Jap. Plums,** very light or complete failure. **Nectarines and Peaches,** light to medium. **Apricots,** good.

The season generally is not promising too well, owing to wet and stormy spring, and last year's heavy crop.

BE A HERO.

Do you want to be plucky?—then start, I say,

In the little old tracks of the every day;

For it's there you'll learn to be plucky and strong,

To whistle and sing as you march along!

'Tis just in the scraps and the odds and ends

We notice the grit as a brave soul wends!

There isn't much praise and there isn't much pain

In half the trifles that make up a saint!

'Tis a kind act here and a cheer word there,

And a laugh of courage just everywhere!

They seem so petty and small—but still,

They're splendid physic for heart-ache's ill!

And some may stand in the lime-light's blaze,

And some fight on thro' the grey-mist days;

But never be daunted, "play the game,"

And earn your right to a hero's name.

—Lillian Gard, in "Pearson's Weekly"):

Fruitgrowing Under Irrigation

(By Our Special Correspondent.)

THE WEATHER CONDITIONS during the early part to the middle of December have been oppressive, high temperatures, followed by thunderstorms and humid conditions were very favorable to the growth of fungoid diseases.

Growers in many cases have been busy with the spraying machines, coating their vines with copper spray compounds to check any development or spread of the Black Spot. Also to guard against an infection of Downy Mildew; though this disease has not been known on the river during the past three seasons one lives in a dread of it again appearing.

The sulphuring of the vines against Oidium has been more or less general, as this disease spreads rapidly even without free moisture, it needing only a humid atmosphere for its development. Growers who have not taken the necessary precautions to check the development of the diseases are advised to keep a sharp lookout for trouble.

Oidium can be checked at any stage of its development, but the measures against Black Spot and Downy Mildew are preventive. Once these two diseases have entered the plants, it cannot be reached without destroying the affected area, but the spread to the new foliage can be checked by coating it with a copper spray, such as Bordeaux or Burgundy Mixtures.

Fungus diseases of the Apricot and Peach are never of much consequence in the Mid-Murray Areas, but during the period under discussion a little scab has been noticeable upon the Apricots.

Many of the Orange trees have also shown the effects of the changeable weather conditions, but this trouble dates back to the late Spring and early Summer. During the flowering period, which was an exceedingly heavy one, the weather was very changeable, from very hot bursts changing to sudden cold snaps. The fruit set very well, but owing to the rapid variations of temperature, disorders were set up in the sap supply and in the transpiration. These disorders were followed by a late fall of leaves, and in many instances a heavy fall of fruit, the trees taking on a very ragged appearance.

As the season advanced, new growth appeared, and the trees are resuming a more or less normal appearance, though many of them will not carry the crop that the flowering promised.

It is very noticeable that where good orchard practices have been followed, in the way of thorough cultivation and manuring, the trees have

withstood the unseasonable weather, and are in splendid fettle and have retained their crop.

Where trees are still more or less ragged, and have a yellowish appearance, they should be given a tonic, such as Sulphate of Ammonia or Nitrate of Soda at the rate of 1 to 2 cwt, per acre, according to the condition of the trees. This fertilising should be followed with the sowing of a green manure crop, such as field peas or tick beans.

Sow at the rate of 1 bushel of seed per acre, giving a dressing of 2 to 3 cwt. of superphosphate or bone dust per acre with the seed.

Green manure crops should be sown in late February or early March, in order that the plants may be turned in during July.

The whole of the soils in our Mid-Murray irrigation areas are deficient in organic matter, and the soil will never be in good condition until this deficiency is made up. Owing to the scarcity of stable manure the sowing and plowing in of green crops is the only means at our disposal of making good the humus content of the soil.

The Importance of Humus.

Growers do not realise what an important factor humus is in the soil, especially in these semi-arid regions, where there are long periods between the irrigations.

Moisture is the life blood of the plant, and if the soil can be brought into such a condition that the moisture is retained, the soil will be much more fertile and the irrigations applied could be lighter. This being the case, the danger of seepage is lessened, as with lighter irrigations there will be less likelihood of water-logging the soil.

The following figures will perhaps help to convince growers of the advantage of adding humus to the soil:

100 lbs. sand can hold 25 lb. water.
100 lb. humus can hold 190 lb. water.

* * *

DRYING OPERATIONS.

APRICOT PICKING and drying have already commenced (December 15th) to a small degree, a few growers having small areas of Oullin's Early. This variety is not looked upon as a first-class one for drying purposes, and has not been planted extensively in these areas.

The drying of the Apricot will be in full swing by Xmas, and though

the crop is light, the fruit is exceptionally fine, and with careful handling the finished product should be a credit to the Commonwealth.

The Peaches give every promise of producing a very fine sample of fruit, the drying operations are similar to those described last month for the Apricot. The only point of difference is that the Peach will take more sulphuring, being a larger and thicker fruit, to thoroughly bleach it.

Towards the end of January the Currants will be ripening up, and growers will be anxious to begin picking operations.

Do not commence too soon; remember that the bulk of the crop has to be placed on the overseas markets, and has to compete with the currants produced in the Levant and elsewhere.

We must produce the best, and we can, it lies within our own hands; we have the fruit, let us cure it properly, grade and pack as the buyers demand, and this will go a long way in gaining the market.

Never pick the Currants until they are black; reddish berries spoil the look of the finished article. Always test the must, see that the Beaume reading is at least 13, but 14 is preferable, before picking commences.

VISIT TO THE STATE EXPERIMENT ORCHARD, BERRI, RIVER MURRAY, SOUTH AUSTRALIA.

THE MEMBERS of the local branches of the Agricultural Bureau visited the above orchard on December 4th. They were received and conducted over the station by the Deputy Horticultural Instructor and Manager (Mr. C. G. Savage).

The station has never looked better than at the present time, the whole of the trees and vines are making splendid growth; this is due, to a large measure, to the excellent condition of the soil in regard to thorough cultivation.

The visitors were greatly interested in the overhead systems of irrigation, there being trial plots of both the Skinner and Nunan systems in operation. As these tests have only been in operation for 12 months, no definite conclusions can yet be drawn from them.

The underground drainage scheme was seen in operation; it was reported that since the commencement of the scheme in November, 1922, that over 9 tons of soluble salts have been removed from the soil. The trees growing on the edge of the salty areas were showing signs of recovering, and were sending out much healthier growth than in the past.

The Washington Navel Orange trees that were cut down because of the inferior bearing qualities and the coarseness of the fruit produced, have all been worked over. The buds have

made splendid growth, and early reports are looked for on the results from these trees. The buds were all selected from two trees, which have consistently borne heavy crops of good quality fruits.

The Smyrna Figs were showing every indication of a heavy crop. The Capri trees were carrying heavy crops of the prolific or spring Figs, bearing the wasp (*Blastophaga grossorum*). Caprification operations had not commenced when the visit was made, but a start was made later in the week. The dried fig industry has a big future before it in the Murray Valley, and this orchard has done much to pioneer the movement.

The citrus plantations showed great improvement where nitrogenous manures had been applied, not only in the healthy appearance of the foliage, but also in the crop that has set.

Much interest was shown in the examination of the training tests of the vines, especially in the Sultana plots.

The vines with their canes depressed, and tied below the arms appear to be carrying heavier crops than where the canes are tied above the main arms.

The Ohanez or Daria vines trained upon over-head trellises, are making good growth; it is hoped that an export shipment will be made from this plot during the present season. It is understood that several other varieties from the collection vineyard will also be tested.

The examination of the young Prune stock tests and the newly-planted vines set out for a comprehensive trial of various fertilisers and manures brought a very interesting and instructive afternoon to a close.

South Australia.

CROP PROSPECTS.

Norton's Summit.

Mr. C. W. Giles, Grove Hill, Norton's Summit, reports (17/11/23):—

The principal fruits grown here include Apples, Pears, Plums, Cherries and a few Oranges. Apples include Romes, Jon., Gladstone, Reinnette, Strawberry, Pippin, Cleo, Dunn's.

Pears.—Duchess, D'Anjou, Kieffer, Packham's, Madame Cole, Napoleon and Clairgeau.

Plums.—Diamond, Angelina Burdette, Golden Drop, President, Reine Claude de Bavay, Grand Duke, Fellemburg, Green Gage, and Robe de Sergeant.

Cherries.—Early Lyons, Early Purple Guigne, Black Tartarian, St. Margaret's, Waterloo, and Werder's Early.

Coming Season's Prospects. — Apples, good. Pears, medium. (Duchess, good in places). The trees this season had a sickly appearance, possibly caused by excessive wet. Kieffer seems to have suffered the most. Will grub out a lot of Pears next season. Plums: Light crop. Local market will take them all. They

bloomed well, but a big storm affected the setting of the fruit.

Cherries.—These were better than expected, but Cherry-growing has its disadvantages. (1) Birds play havoc with the early varieties. (2) Owing to wet weather, fire-blight develops. (3) The Cherry-slug is extremely troublesome, which can be controlled by spraying with Arsenate of Lead, but this takes golden time when other work is pressing.

The wet weather started on May 8th, and lasted six months, not only doing harm to the orchards, but also causing landslips.

The Apple and Pear crop will be better than last season.

Orange trees suffered more than any other this season, due to the wet weather. (I shall lose about half of mine.) The ground is well drained, besides having a large breakwater at the mouth of the gully, but our ground was simply under water, which Orange trees will not stand. The wet weather, of course, seriously delayed all cultural operations.

In conclusion, I would say that unless we can put out fruit on the world's markets at the same price as the other fellow, and reduce our overhead charges considerably, I can see no hope for us to compete for the world's trade.

Light's Pass.

Mr. S. Plush writes (20/11/23):—

The principal fruits grown here are Peaches, Apricots, Currants, and Pears. (Prunes and Apples in less quantity).

Crop anticipations: — Currants, heavy. Peaches: Elbertas, heavy. Others light. Apricots: Variable, light to medium. Pears: Bartlett, heavy; others light.

Prunes: D'Agen, heavy; others, light. Apples: Heavy.

Owing to excessive wet the Peach and Apricot crops in places suffered considerably. Several thousand trees in the district have died.

Waikerie, River Murray.

A correspondent writes (17/11/23):

The principal fruits here are Currants, Sultanas, Lexias, Citrus (principally Navels, but fair proportion Valencias and Mediterranean Sweet), Apricots, Nectarines and Peaches.

Crop Prospects.—Sultanas, Currants and Lexias show promise of good year. Citrus likewise (but too early to say anything definite). Apricots, light. Peaches, good. Nectarines very light. Speaking generally, prospects this year are much ahead of last season's returns, with the exception of Apricots and Nectarines.

Growers are feeling the pinch of low prices for Dried Fruits in the London market and the slow sales in Commonwealth. A lot of dried fruit (more so this year) has been disposed of to outside buyers, who exploit local markets at just under A.D.F.A. prices, thus riding on the shoulders of the Association that built

up the industry. These outsiders should, in some way, be compelled to export the same percentage of fruit as the loyal members of the A.D.F.A.

Citrus.—I agreed with the published remarks on Citrus Association in reference to channels of distribution by getting co-operation of all established firms engaged in the selling of Citrus, as these people have the brains and machinery, and with their loyal support, it means increased sales and consumption. There must be amicable relations between grower and distributor.

SPRAYING TEST AT BLACKWOOD ORCHARD.

At the Government Experimental Orchard, Blackwood, attention has been recently given to the question of mixing various sprays, and the subsequent effect on the trees and fruit noted. A small test is being carried out to glean, if possible, to what extent the Burgundy and Bordeaux sprays cause russetting of the fruits (writes the "Garden and Field.") In connection with the treatment of Woolly Aphis, tests are being carried out with a view to determining whether an application of salt to the soil has any deterrent effect, and what are the minimum and maximum quantities that may be used with safety. It may be possible shortly to introduce colonies of the parasite, *Aphelinus Mali*, an insect that is reported to be doing good work in assisting to control the spread of Woolly Aphis in parts of New Zealand. The parasite is being established in one of the other States and it should be possible to introduce it here at a later date without any danger of also introducing the much-to-be-dreaded Fire Blight.

A comparative spraying test has also been carried out with Liquid Bordeaux and Burgundy mixtures, Bordeaux powder, and ordinary Burgundy mixture as usually used in the orchard for the control of Peach Curl Leaf. At present, results go to show that for cheapness and efficiency there is nothing to beat the recognised Bordeaux or Burgundy Mixtures if carefully made and properly applied. Ferrous sulphate applied to the soil at the rate of 5 oz. to the tree, has also been tried for a number of years as a fungicide, but it may be claimed with almost disastrous results, as the Peach trees so treated having been almost killed by Curl Leaf, and they are at present, and have been at every springtime, covered with diseased leaves.

Reduced Crop at Angaston.—"Since sending in our report we find that the Apple crop is not as good as was showing early in the season," write Messrs. Trescowthick Bros., Angaston, S.A. "Many trees have been affected by the wet season, and have shed the fruit, and in many places *fusicladium* has made its appearance on the leaves and fruit."

Victoria

Crop Reports. Fruitgrowers' Meetings. District Notes.

Harcourt.

Mr. Eb. Eagle, Harcourt, reports (30/11/23):—

The principal fruits grown are Apples and Pears. The most up-to-date orchardists prefer such Apples as Cleo, Munroe, Jon., F. Crown, Spitzenberg, Delicious (a splendid Apple), Rymers (largely grown, but I would cut them out), Shroeder's, Yates' (not largely grown), but some fine samples were grown here this year, and can be grown very profitably. Gravensteins are grown, but not largely. This is a beautiful early Apple. There are many other varieties, such as Annie Elizabeth, Cox's Orange Pippin, Ben Davis, King David (good), Granny Smith (good), Stewart's Seedling, Scarlets, Eagle's Seedling, and a host of others.

H. M. WADE & CO.

Fruit Merchants

Prompt Advices of Sales
—CHEQUES WEEKLY—

**471 FLINDERS LANE
MELBOURNE**

Pears.—Winter Nelis, Josephine, Williams', Cole's, Capiamonts, Gansell's, Eyewood's, Howells', B. Bosc, D'Anjou, Packham, and many other varieties.

Coming season's prospects:—

Apples.—Rome Beauty (very light), Five Crown (light), Munroe's and Schroeder's (very good), Jonathan (very good). Apples generally, good medium.

Pears.—Mostly heavy. Williams' (very heavy), Josephine's (good), Winter Nelis (very light), others heavy.

Cherries, light. Apricots, light. Plums, medium.

Ballendella.

Mr. J. M. Foord, Ballendella (V.), writes: 20/11/23:—

Apricots.—Moor Park, light; other sorts, heavy.

Peaches.—Medium (Elberta and Pullar's).

Pears.—Williams', heavy. Figs, first crop heavy.

Narre Warren.

Mr. R. E. Haysey, Narre Warren North, writes (17/11/23):—

The prices received were above the average for cold-stored Apples. In the cold weather in mid-November, most growers omitted the calyx spray, as the weather retarded the appearance of the earliest codlin brood. Some growers suffered from severe hail storm, which went through the district in strips. Gravenstein Apples and forward soft fruits consequently suffered in the orchards affected, but we expect that most of it will grow out, and only leave a slight blemish.

After the heavy Apple crops of last year, and the extended dry period, growers were a bit uncertain as to what the bloom would be like. However, we were pleased to see a fair showing of bloom, which started setting heavily till mid-October, when thrips put in an appearance, thus all later settings were patchy and late blooming trees, such as Romes- and Five Crowns will be light, except in isolated cases.

Apples.—Our main crop is Jonathans, which has set about the best, though some growers report light. The district average will be medium. Yates, fair; Gravenstein, medium. Dougherty (not many grown), heavy. Delicious, very good. Statesman, light. Other varieties, light to medium.

Pears.—Williams' and Kieffer, medium. Bosc, very good. Winter Cole (few grown), good.

Peaches.—After having extensive losses in Elbertas, these are being grubbed out or re-budded with desserts. Other varieties (not many grown), good.

Generally, the crop can be summed up as follows:—Apples, light to medium; Pears, medium; Peaches, good; Plums, good.

Good Crops of Rome Beauty.—It is reported that Mr. R. Webb, of Narre Warren, has a splendid crop of Rome Beauty Apples. This is contrary to the experience of the district and State generally. Mr. Webb sprayed his trees with red oil in July with the idea of assisting the trees to bloom at the same time as Jonathan, as trees of the latter variety are in close proximity to the Romes.

The plan was successful. The Romes bloomed in time to be pollinised by the latest of the Jonathan blooms. The fruit set, and thus avoided the heavy attacks by thrip which wrought so much havoc to Rome Beauty crops elsewhere this season.

Blackburn.

Mr. J. Stevens, Blackburn, reports (28/11/23):—

The coming fruit crop in this district is light generally, partly owing to cold, wet weather during the blossoming of Pears, such as Kieffer, W. Nelis, Packham's, and in some cases, Howell's. Other Pears have better crops, but speaking generally, the Pear crop will be on the light side.

Owing to the enormous damage done by thrip, the Apple crop will be light, some varieties an utter failure, such as Romes, Five Crown, Emperors, etc.; Jonathans are patchy here, and there is a good crop on the old trees. Young trees almost a total failure. Yates, light to good. Shorland Queen, good; Rymers, good; Fameuse, light to good.

Cherries.—serious loss owing to thrips. Cherry growers suffered very considerable loss, also flower growers and other producers. Plums are generally light.

Wonga Park, near Lilydale.

Mr. Fred Topping writes (16/12/23) —The crops of fruit in this district are on the light side, only the early Apples showing up well. Thrip was the cause of the failure of the others. Cherries were good.

Wandin North.

Report from Mr. E. Burgi, 29/11/23. Crop anticipations:—

Apples.—Very light. (Five Crowns and Romes almost absolute failure).

Pears.—Light, except B. Bosc and Williams', which are medium.

Plums.—Light. Cherries.—Good. Apricots.—Medium.

Peaches.—Medium to good.

Strawberries.—Light, owing to thrip. Blackberries.—Very light. Loganberries.—Medium.

The best variety of Strawberry here is "Up-to-Date."

Re Passion Fruit.—Last season's crop was satisfactory. It is too early to predict what the coming season will be like.

Conference of Packing Sheds' Companies.—Efforts are being made to convene a meeting in Melbourne shortly of the various packing sheds who handle fresh fruit for export, to discuss the question of handling and packing export fruit. The Diamond Valley Fruitgrowers' Co-operative Association (C. H. Ford, Secretary) is endeavouring to arrange the Conference.

The proposal for a Conference is commended to all who are seeking the better organisation of the industry.

FRUITGROWING "WILL DO US."

"There's nothing wrong with fruit-growing," writes a successful and experienced grower at Somerville (Vic.):—"The whole success depends upon the man who owns the orchard doing the job at the right time and doing it well. At any rate, it will do us.

"What's wrong with Broom Park Pears at £1 a case, and Jonathan Apples to 14/- in the local market?

"We have already had 77 acres of orchard land, and have just purchased another orchard of 26 acres next to us, comprising mostly Jonathan, Chandler, Rokewood Apples and Broom Park Pears.

"For getting out the strips after ploughing, use the Harvey Grape Hoe. After its use there are no strips."

VICTORIAN FRUITGROWERS' CENTRAL ASSOCIATION.

The monthly meeting of the executive of the above Association was held on December 18th. Present:—Messrs. G. Mock, J. Tully, H. Hatfield, A. F. Thiele, J. H. Lang, J. W. Bailey, W. E. James, W. J. Foster, Secretary and Treasurer.

An apology was received from Mr. V. R. McNab.

Wood Wool.—It was decided to

this Association would be glad to assist him in any way possible.

Fruit for British Empire Exhibition.—It was decided to write the District Associations asking them what quantity of Apples, Pears, Plums and Peaches they would be prepared to supply for the Exhibition. Expenses will be paid by the Government, also cases supplied. After the Exhibition the fruit is to be sold and proceeds returned to growers supplying fruit.

bureau, owing to the short supply of fruit all round. The sub-committee was thanked for its support, and asked to carry on.

Superintendent of Horticulture.—It was decided to write congratulating Mr. J. M. Ward on his appointment to the position, and wish him all success.

Arbitration Court.—At a special meeting of the Council it was decided to approach the Prime Minister with a view to introducing a Bill into Parliament exempting rural industries from the operations of the Arbitration Court awards. The support of the Country Party to be secured.

Primary Producers' Bank.—Attention is directed to the banking facilities offered by the Primary Producers' Bank, the main object of which, states the directors, is to render banking service to the man on the land. The keynote of the service is to give sympathetic consideration of its customers' needs when financial stringency and droughts arise. The Head Office is at 11 Castlereagh-street, Sydney, and branches have been established in Queensland, New South Wales, Victoria, and South Australia. The capital subscribed is over £1,100,000. The general manager is Mr. F. W. Strack, whose banking career is well and favourably known.

KEEP ON KEEPING ON.

Keep on looking for the bright, bright skies;

Keep on hoping that the sun will rise;
Keep on singing when the whole world sighs,

And you'll get there in the morning.

Keep on ploughing when you've missed the crops;

Keep on dancing when the fiddle stops;

Keep on faithful till the curtain drops,
And you'll get there in the morning.

Bookkeeping and Income Tax.—Save yourself hours of needless worry. It's all worked out for you in the Fruit World Annual (bound in stiff covers). Worth £2/2/-: Price, 3/- post free from the Fruit World, 9 Queen-street, Melbourne (Vic.).

Wanted to Purchase

20,000 Cases Apples for Export

Forward quantity, varieties and lowest price wrapped and packed, to

PARNHAM PTY. Ltd.

Overseas Fruit Exporters

60 Queen Street, Melbourne



Top Picture.—In Mr. Robt. Mair's orchard at Tyabb, Vic. Mr. Mair is on the left and Mr. H. J. Willoughby on the right.

Lower Picture.—Mr. H. J. Willoughby (President of Tyabb Fruitgrowers' Association) amongst his Jonathan apple trees.

protest against any increase in or a dumping duty on imported wood-wool, as the local article was not considered suitable for export fruit.

Export to the East.—Mr. H. L. Pang wrote stating that he was visiting China in January, 1924, and would be looking into the question of a market for fruit. He would be glad of any suggestion. It was decided to write Mr. Pang stating that

Fruit Bureau.—It was reported by the sub-committee that as only 44 growers had enrolled to supply fruit, it was decided not to establish a bureau this year. The Housewives' Association to be asked to carry on at present with the assistance of the Committee: Registration fee, 10/-, and 7½ per cent. commission. It was considered the present year was an inopportune one to commence the

Tasmania

CROP REPORTS : DEHYDRATION : EXPERIMENTAL SHIPMENT OF PLUMS : CHERRY APHIS

(By Our Correspondent)

THE PRESENT SEASON has proved one of the most abnormal on record. Rain fell intermittently throughout the whole of the Spring months. Weather conditions are now improving, but gales and strong winds have been prevalent during the month, and have somewhat thinned the Apricot and Plum crops.

The Apple crop will only be about half that which is harvested in normal years, and a large percentage of fruit is affected with Black Spot.

Some varieties, such as French Crabs, Scarlets, Cleopatra, and Ribston are a complete failure in most districts. Jonathan, Sturmer, Dunn's and C.O.P. are medium to light crops. The best showing is on Adam's Pearmain, London Pippin and Alfriston. These are also much cleaner on the average than the other kinds.

Pears are also light to medium, the most promising being Clairgeau, Winter Cole, and B. Bosc. Varieties, such as Josephine, W. Nelis, Glou Morceau, have a very sparse setting. The canning varieties, Williams' and Kieffer, are also a light crop.

Plums.—These are generally medium to heavy crops, and should be above the average quality and size.

Apricots.—The heavy winds of the last few weeks have somewhat thinned out the crops, but the trees still generally carry a heavy production. The fruits are also of good size and quality, and the yield of first grade fruit should be high.

Small fruits are promising well, and with warm and dry weather around the ripening period, should furnish good all round crops.

Dehydration of Apricots.—The plant that is being installed at Bellerive by Mr. J. H. Morton is making rapid progress towards completion, and should be ready to treat the coming season's crop. The site chosen is a good one; it is in the centre of the Apricot growing district with access to water and power.

It is estimated that approximately five tons of green fruit can be treated per day when everything is in going order. This process should form a valuable means of outlet for surplus crops, and does not make the grower entirely dependent on the jam and canning factories.

The fruit that was dehydrated at Bridgewater last season turned out a high class product, and met with a ready sale. If sufficient inducement is offered, the company proposes to treat vegetables, Prunes, Apples, Pears and some of the "small fruits."

Experimental Shipment of Plums.—A chamber on the Commonwealth Line steamer "Esperance Bay" has been allocated to Tasmania for experimental purposes. The vessel loads at Hobart on February 16, so it is proposed to utilise this for an experimental Plum shipment. The fruit will be specially packed in single trays, being held in cold store until the vessel's arrival. Varieties for shipment are limited to Grand Duke, Satsuma, Golden Drop, President and Wickson. It will be remembered that an experimental shipment of Plums was forwarded to London in 1922. This was a complete failure, which was largely due to lateness of despatch. It will be interesting to see how the February shipment arrives under the conditions detailed.

Cherry Aphid.—This pest has only appeared in Tasmania during the last two or three years, but owing to its spread, and the damage occasioned by the aphids, is causing much alarm to Cherry growers. Reports are to hand that many trees have been almost defoliated by the pest, and that doubts are entertained as to their recovery.

In order to combat infestation, it is advisable to spray with Lime-Sulphur or Oil Emulsion at the late dormant stage, i.e. (when the bud scales are relaxing, and the first sap movement commences.) This will account for any of the over-wintering eggs that are laid in the cracks and crevices of the bark, and also destroy newly-hatched aphids.

Control, when the pest is established on the foliage, is difficult, as the curled leaves protect the colonies against spray applications. The best treatment at this period is to thoroughly spray with strong nicotine solution. This will check development of the pest.

Bonus on Export of Green Fruit.—Tasmanian Apple exporters are entitled to every consideration from the Commonwealth Government in their request for a bonus to be placed on fruit exported to overseas markets.

During the war, and with each successive season, the position of these producers has been most unsatisfactory. Very little space was obtainable for export during the war period, and in years following the high freights and costs have militated against a profitable development of the trade.

In comparison with the Pear, Peach and Apricot producer the Apple grower has received no assistance in the shape of pools or subsidies. The Tasmanian Apple exporter has a good

case to present, and should, in all fairness, be treated on the same basis as other branches of the industry.

Overseas Export.—A suggestion has been put forward that arrangements be made in London, whereby a small committee, representative of growers and agents, be formed to maintain a surveillance of the general methods of marketing.

The proposition is that this body should be placed in a position so that they may take up the whole of the bills of lading, and have power to ensure that the consignments were handled to the best of advantage to the grower. On the face of it, the suggestion seems excellent, and should be productive of much good, besides eliminating certain undesirable elements.

Bridgewater—Brighton.

The principal fruits grown in the Brighton district are Apricots, Apples and a few Currants and Raspberries.

Coming season's crop of Apricots looks like being very large. Good crops of berry fruits showing.

Last season the crops were also splendid, when Apricots grew to phenomenal sizes; prospects the same this year.

The Tasmanian Dehydration Pty. Ltd. commenced operations last season by installing a "Latham" Dehydrator plant at Bridgewater, and had a successful run during the season, producing a very fine sample of dried Apricots, which, on account of their great size and quality, were very highly commented on. Apples in fair quantity were also dried, and found a ready market, being superior to the evaporated article.

The Company, under the management of Capt. J. A. Newman, are doubling their plant in readiness for this season's bumper crop.

An additional drying factory is also starting operations in the Cambridge district, which tends also to help the grower, by relieving the glut of Apricots caused by the present depression in the pulp market.

Sandford.

Mr. D. Calvert, Sandford, reports (25/11/23):—

Owing to excessive rains, Apricot and Pear crops are light, and Apples medium.

New Norfolk.

Report by Mr. H. Ashton Warner (19/11/23):—

The principal fruits grown are Apples, Pears, Plums, Raspberries, and Black Currants.

The coming season's prospects are:—Apples, medium (Scarlets, light). Pears, medium. Plums, medium to heavy. Raspberries and Black Currants, medium to heavy.

Messrs. H. Jones & Co. have erected a factory at New Norfolk to preserve Raspberries.

Huonville.

Mr. Merton Calvert reports (27/11/23):—

Principal fruits.—Apples and Pears. Crop generally lighter than last year. In many orchards Black Spot is very prevalent around Huonville. Apples, medium crop (Scarlets very light). Pears, medium throughout.

The Huonville Cool Stores are now being enlarged to be capable of handling 55,000 cases.

Ranelagh.

Mr. N. H. Calvert, Ranelagh, Huon, (27/11/23):—

Apple crops very light this year in the Huon districts. Black Spot showing on fruit and leaves. Scarlets a complete failure in most orchards. Last year crops were heavy right throughout the district. Pears, fairly good. The principal varieties of Apples grown here are Sturmers, Scarlets, French Crabs, New York, Jonathan and Ripstones.

Triabunna.

Mr. S. W. Goold, Ross Trevor Estate, Triabunna, reports (23/11/23):

The fruits grown commercially in this district are Apples, Pears, Plums and Quinces. The coming season's prospects are light all round.

Last season's crops good.

Starling Pest Increasing.**New Packing Shed.**

Lalla.—Mr. Frank Walker, Nursery and Fruitgrower, of Lalla, N. Tas., writes, under date Nov. 20:—

The Starlings have become such a pest in this district that we have been forced either to net our Cherries in or grub them out; having decided to wire net them, we are now very busy with the work of covering a large area, which are trained on the Espalier system, with the rows 10 feet apart and 7½ feet high.

Mr. Walker has also recently erected a very large up-to-date concrete packing shed at the Lalla railway station. The shed is connected with the railway system with a private line with accommodation for six trucks.

NEW TASMANIAN DEHYDRATOR.

A company, entitled Tasmanian Fruitgrowers' Dehydrators' Ltd., has been formed to erect a Morton "Efficiency" dehydrator at Bellerive, near Hobart. Many local Apricot growers have become shareholders. The chairman is Mr. James Murdoch, Junr., and the organising manager Mr. J. H. Morton.

APPRECIATION.

Montville, Queensland,

4/12/23.

I am always pleased to get the "Fruit World," as it always contains good reading for fruitgrowers.

W. H. H.

New South Wales**MURRUMBIDGEE IRRIGATION AREAS.****Progress of Settlement.**

The Minister for Agriculture, Mr. F. A. Chaffey, M.L.A. (who is also Chairman of the Water Conservation and Irrigation Commission), has supplied (under date November 28th) the following information as to progress on the Murrumbidgee Irrigation Areas:—

The vines and trees are looking very healthy, and good showings of deciduous fruit and Grapes are the rule rather than the exception. A heavy hailstorm, which recently passed across a limited section of the Area, is reported to have done considerable damage to the Apricots, Prunes and Plums on a few orchards, but the damage is in the main restricted to these properties, and although it may be serious to individuals, the acreage affected is small compared to the aggregate area in bearing.

The citrus trees are blossoming profusely, and indications point to a successful season.

Professor H. J. Quayle, of the University of California, spent some months on the Irrigation Areas last autumn demonstrating the value of calcium cyanide dust as a cheap and effective method of fumigation. Settlers are so satisfied with the results of Professor Quayle's work that an agitation has sprung up to

make fumigation compulsory in those sections of the citrus growing districts that are affected by red scale. The Commission has agreed to take action under its Acts, which give power to enforce fumigation if deemed necessary, and arrangements are being made for the compulsory fumigation of all trees in an area which has been selected by the Fruit Inspector of the Department of Agriculture.

A lot of interest is being shown in **Cotton production.** Although, in common with many other districts of the State, seed did not arrive last year until very late, the results under irrigation were deemed sufficiently satisfactory to warrant much heavier experimental plantings this year.

A visit was recently paid to the district by Mr. Richard Harding, of the British-Australian Cotton Association, and arrangements were then made by him with the Inspectors of the Department of Agriculture to plant out a considerable area, mainly on soldier settlers' farms. It is anticipated that over 100 acres, possibly produced by 30 or 40 settlers in small plots will be planted on the Yanco Section of the Area this year, while an even greater area is likely to be planted on the Griffith Section. Some of the seeding has again been left rather late, but the experience gained will be very valuable.

The very satisfactory results achieved last year with rice experimentation led to arrangements being made by the Commission to plant out a larger area this year.

At the present time the dairying industry throughout Australia appears to be in a state of transition. Old methods of production do not appear to adequately meet the strenuous economic conditions at present existing and conservation of fodder and intensive dairying more on the lines practised in Denmark and the United States are being everywhere spoken of, even in the north. So far as the Irrigation areas are concerned, the opinion seems to be now generally held that the conservation of fodder and the adoption of a method of hand feeding are necessary if the best results are to be obtained under irrigation, and it is anticipated that with the adoption of such methods generally the success already achieved in connection with this industry will be greatly increased.

The total number of settlers on the Irrigation Areas is now officially given as 2,084, and the area included in the farms allotted reaches the total of 120,885 acres.

The production of the Area for the year ended 30th June last was estimated at £575,000.

CROP PROSPECTS.**Griffith.**

Crop anticipations for the coming season are:—

Apricots. — Trevatts, medium; Mansfield's and Moor Parks, light. Last season all varieties heavy.

Peaches.—Cling and Slipstones, medium. Nectarines, light.

Plums.—Heavy. **Prunes.**—D'Agén's, medium to heavy; Robes, light to medium.

Oranges.—Navels and Valencia's, heavy. **Mandarins.**—Heavy. **Lemons.**—Medium.

Grapes.—Table and Wine, exceptionally heavy.

Apples and Pears.—Light.

No pests of importance have appeared so far except Peach Aphid, which has taken considerable toll of the Peach crop, which would have otherwise been heavy.

New South Wales.

Mr. W. J. Allen, Government Fruit Expert and Irrigationist, advises re crop anticipations in the State of New South Wales as follows:—

Apples.—There is a light crop very generally throughout N.S.W.

Pears.—Light to medium.

Cherries.—Mostly a light crop, except on the Northern tablelands, where the crop is fair to heavy.

Apricots.—Light to fair.

Plums.—Light in the coastal districts, and fair in the inland and tablelands.

Grapes.—Generally throughout the State promise a heavy crop.

Citrus.—Very generally have blossomed heavily, but very sudden changes in temperature have occurred during the spring, and in many places it has been very dry, so that it is impossible to state how the crop will turn out.

Bathurst District.

Mr. H. S. Wark, White Rock, via Bathurst, N.S.W., reports:—Apples, light; Peaches and Grapes, heavy; Pears, medium. Last season Apples and Peaches were heavy, Pears and Grapes medium.

Penrose.

Mr. F. W. Chesterfield, "Los Angeles," Penrose, reports, 26/11/23: The principal fruits grown in the Penrose district are:—

Apples.—Five Crowns, Granny Smith, Jonathan, Fameuse, Gravenstein, Mac. Red, Rome Beauty, Yates, Dunn's, Delicious.

Pears.—W.B.C., Packham's, Vicar, W. Nelis, Winter Cole.

Peaches.—Italian Red, Pullar's Cling, Elberta.

Plums.—President, Diamond.

Coming season's prospects.—Light: the district is fairly free from Black Spot. (Last season—heavy).

New Developments.—The Penrose-Kareela Co-operative Packing Shed opened the beginning of 1923.

Lavington, via Albury.

Mr. J. T. Ebert, reports (26/11/23). The principal fruits grown here are Apples, Pears, Peaches, Prunes, and Zante Currants.

The coming fruit crop is not heavy, owing to a lot of rough weather in the early spring. But we expect the fruit to be large.

The Zante Currants are showing a fine crop, as well as Grapes; also a vigorous growth.

Young trees planted this season are showing a healthy growth.

HAWKESBURY COLLEGE INSTALS DEHYDRATOR.

The Hawkesbury Agricultural College, Richmond, N.S.W., has placed an order for an "Invincible" Dehydrator.

The selection of the plant was made by the officers of the Department, after full investigation, and will be used for demonstrating to the pupils of the College the latest methods in dehydrating all classes of fruit, vegetables, etc.

Sulphate of Ammonia in Vineyard.

—“You will be pleased to know that owing to the use of your sulphate of ammonia in our vineyards,” write Messrs. H. Buring and Sobely Ltd., to the Australian Sulphate of Ammonia Propaganda Committee, “that portion

to which it was applied, at the last vintage showed an increase of 25 per cent. in the production of Grapes. In fact, we anticipate bigger results later on, and intend continuing its use.”

Selling the Citrus Crop.

V.C.C.A. Replies to Melbourne Merchants.

The Secretary to the V.C.C.A. (Mr. B. S. B. Cook) supplies the following in reply to the article in November "Fruit World" by the Wholesale Fruit Merchants' Association of Victoria. [This was held over through pressure on space from our December issue.]

Mr. Cook writes:—"Views are expressed in the November 'Fruit World' on behalf of the Fruit Merchants' Association, to which Mr. H. M. Wade has seen fit to subscribe his name, which purport to be a reply to the case for the Citrus Growers' Association, presented in the October number of this paper. As a fact, they merely serve to demonstrate the weakness of the position taken up by the merchants.

"Everybody knows the old trick of the controversialist, 'when you have a weak case abuse the other side,' so the writer of the article quite naturally devotes considerable space to a personal attack on myself with the object of throwing a smoke screen round the main issue, namely, whether the grower who owns the fruit is to have any real say in the conditions under which his fruit is sold, or the fruit merchant is to be left in unfettered control as in the past.

"I had nothing to do with the formation of the Victorian Central Citrus Association, but I ask the fruit merchants do they know what brought it into being? Was it because the citrus growers were perfectly satisfied with the way in which their product was being marketed by the wise merchants of the West, who so cleverly handle this very intricate business. There are ninety-nine other questions in the same category, but the answer to the above will do to go on with.

"The writer of the article under notice asserts that the fruit merchants are not out to smash the V.C.C.A. This is good news, for which, we hope, we may appear duly grateful. But we may be excused for mentioning that there have been some strange happenings which led us, in our simple-minded way, to other conclusions. We can guarantee, however, that this disclaimer, by the Chairman of the Fruit Merchants' Association, will be accepted at its true value by our members, who were asked personally or by letter by members of the Fruit Merchants' Association to break away from the V.C.C.A.

by sending their fruit to outside agents. Those who attended meetings addressed by emissaries of the Fruit Merchants' Association at the beginning of last season, will also know how to appreciate it.

"Members of the Fruit Merchants' Association were offered the business, and declined it. The V.C.C.A. therefore made arrangements with four agents to handle it. The V.C.C.A. is satisfied with the result; apparently the members of the Fruit Merchants' Association are not. But they have only themselves to blame. They did not want the business and now squeal because someone else has effectively handled it.

"It is easy to make the assertion that growers have not received full market value for their fruit. 'Twas ever thus. Before the V.C.C.A. came into existence, merchants vied with each other in their efforts to prove to growers that they could get better prices for their fruit than the firm next door. Now they all band together to say the same thing against the four accredited agents of the V.C.C.A. They conveniently overlook the fact that a disinterested observer, namely, Mr. S. A. Cock, the Victorian Government Citriculturist, made the public statement that last year the operations of the V.C.C.A. had resulted in £40,000 more being placed in the pockets of the citrus growers than otherwise would have been the case.

"As for the inference that the fruit merchants were not afforded an opportunity of meeting the growers at the conference, held before the last season was in full swing, all that can be charitably said, is that certain members of that Association are suffering from a strange delusion. A deputation from the merchants asked the Chairman of the Executive if they could attend the Conference, and were answered that representatives would be given an opportunity to address the Conference if they desired to do so. They knew when the Conference was being held, but did not put in an appearance. Whose fault was that? As a fact, they subsequently excused themselves by giving the strange explanation that they did not understand what was expected of them in "an address." Those are the plain circumstances, and they permit of no denial.

"It can serve no good purpose to attempt to follow the devious tracks of the writer of the article in the November issue through the maze of ill-balanced argument and vain assertion, in which he has involved himself. He has evaded the paramount issues raised in the statement on behalf of the V.C.C.A. published in the October 'Fruit World,' and if he is content to let it go at that, we are content also. Growers can draw their own conclusions."



Organising the Citrus Industry.

California's Bright Example.

The Growers' Organisation is Efficient and Co-operates with Wholesale and Retail Distributors.

THE SUBJECTS of organising the citrus industry and the marketing of the crops are of lively interest to Australian producers.

Through the kind services of Mr. V. C. Williams, a returned-soldier grower at Griffith, Murrumbidgee Irrigation Area, N.S.W. (who spent some time in U.S.A.), we have received the following interesting information from Mr. C. S. Whitcomb, Vice-President of the California Fruitgrowers' Exchange, Los Angeles, Cal., U.S.A.

Mr. Whitcomb sends interesting and valuable information as follows:—

The citrus growers in California are associated in co-operative packing and marketing organisations.

Local Associations.—The growers in each locality first form an association for the purpose of packing and despatching the fruit.

These associations are generally corporations, organised on a non-profit co-operative basis. They elect their own directors and officers, and employ a manager to operate the packing house. The manager employs pickers, whom he sends into the orchards to pick the fruit, after which it is hauled to the packing house, generally by trucks, and packed and loaded into the cars.

It is then railed to such markets in eastern U.S.A. as the central selling organisation, called the California Fruit Growers' Exchange, directs.

District Exchange.—The directions from the central exchange come through a district exchange. The various associations in natural geographic localities are organised into district exchanges, there being twenty district exchanges affiliated with the California Fruit Growers' Exchange.

Each association from its board of directors elects one member thereof to serve as a director on the district exchange; the district exchange directorate, therefore, being made up of as many directors as there are associations affiliated with it.

The Central Exchange.—Each district exchange elects one member from its board of directors to serve on the California Fruit Growers' Exchange directorate. The directorate of the central exchange is therefore made up of as many directors as there are district exchanges.

The directors in all of these organisations are always citrus growers themselves.

The Complete Organisation.—The district exchanges and the central exchange constitute the complete marketing organisation. The central exchange supplies the district exchange with orders for the fruit furnished by its associations, and the district exchange apportions these orders out in an equitable manner to the associations.

The central exchange has salaried employees in all of the large markets of the United States and Canada to sell the fruit in those markets, make collections, and transmit the money to the central exchange. The central exchange in turn transmits to the district exchange, the district exchange to the associations, and the associations to the growers.

You will see that by this organisation we keep the growers in as close touch as practicable with the business of the organisations.

The growers are always stepping on the heels of their own directors and association managers. The association managers are constantly after the district exchange managers to see that they get their proportion of orders and shipping directions, and that funds are remitted promptly when received.

The district exchange managers and their representatives on the central exchange board of directors are constantly on the watch to protect the

interests of the district exchange, and to spur on the sales department to handle the fruit to the very best advantage and get the returns back promptly to the growers.

This organisation has been doing business now for over 25 years, and has been very efficient. Its losses from bad accounts average only about one-tenth of 1 per cent. per year.

This past year we have marketed 48,000 carloads of Oranges and Lemons, or about 73 per cent. of the total citrus production of California.

If nothing happens to the present citrus crop before harvest-time, we will market about 60,000 carloads the coming year. [A carload is 750 bushel cases.]

We have many other co-operative and marketing organisations in California built up along similar lines, the methods of conducting the business varying according to the necessities of the industry.

Among these are the Walnut Growers Association, the Prune and Pear Growers' Association, the Associated Raisin Company, the Peach and Fig Growers' Association and others.

FUMIGATING CITRUS FOR RED SCALE IN SOUTH AUSTRALIA.

The Fumigating Plant Operated by Department of Agriculture is Appreciated.

The attention of the Horticultural Branch of the Department of Agriculture was recently directed to the appearance of red scale in citrus trees in the Gawler district (states the S.A. "Journal of Agriculture"). At the request of a number of local commercial growers, the departmental fumigating plant was operated there during the week for the purpose of suppressing the pest. This plant was established 11 years ago, and has been in continuous work since. During the past years it has been engaged principally in the suburban areas and the Salisbury Orangeries.

Some 23,000 trees have been treated during the past 12 months, and it has been amply demonstrated that the use of hydro-cyanic acid gas is a satisfactory means of controlling an otherwise very destructive pest of the citrus family.

In the course of the Australian Fruitgrowers' Conference held in Melbourne recently, at which delegates from all States of the Commonwealth attended, the South Australian Horticultural Instructor (Mr. Geo. Quinn), by request, delivered an address dealing with the operations of the fumigating plant in South Australia. As a result of this officer's explanation of the system in operation in South Australia, growers and officials interested in the production of citrus fruits in Western Australia, New South Wales, and Queensland expressed their intentions of endeavouring to have established in their respective States a similar organisation and plant for the control of red scale.

NEW SOUTH WALES.

The Erina Shire—A Famous Citrus District.

Packing Shed: Fumigation Plant: Manufacture of Essential Oils.

(By Our Travelling Representative.)

THE ERINA SHIRE embraces Gosford,, Narara, Lisarow, Ourimbah, Matcham, Erina, Terrigal, Wyong, Wyoming, Somersby, Mangrove Mountain, etc., It has been proved by the quality and the quantity produced that these districts are second to none as citrus growing districts.

The Gosford District Citrus Packing House Ltd. is in its second year of operation, and has already proved a success, and given satisfaction to its members. Due to the ability of the president and staff, with the assistance of the Rural Bank the Packing House was built and all plant installed, the only expense to the growers being the nominal amount of the share money.

The Rural Bank accepted the idea of limited guarantees from individuals and 30 public-spirited men guaranteed the overdraft of £1,500 through the above-mentioned system, whereby their liability was limited to £50 each, for which they signed promissory notes. They are covered by the assets of the company.

During the first year of operations, 10,000 cases of fruit were put through this being increased to 50,000 cases during the present year.

The grading, packing, labelling and putting on railway, cost 1/- per case, 1d. of which is used for reducing the bank overdraft.

Dry weather was the cause of light crops during the last two seasons. It is estimated that the citrus crop this year was 40 per cent. below normal.

Prof. H. J. Quayle, Entomologist to the University of California, has introduced a new method of combating Scale, and in particular Red Scale, which is one of the greatest pests the citrus grower has to fight.

The method in use is fumigation with calcium cyanide, which, although new to Australia, has been used in California for some years with great success, not only in the control of scale insects, but also for the destruction of aphids, thrip, etc.

Professor Quayle spent four months on the Murrumbidgee Irrigation Area last season, carrying out experimental work under local conditions.

The method of treatment is as follows:—The tent or sheet is placed over the tree as in the case of fumigation with potassium cyanide.

The calcium cyanide is applied by means of a small distributing machine (a photograph of which is published in this issue). The one used during

delivers the charge. The whole of the operation occupies only a few seconds.

The duration of the exposure is the same as that given with potassium cyanide—45 minutes. The expeditious handling is a strong contrast to the time occupied in measuring and mixing the materials for each tree inseparable from fumigation with potassium cyanide. It is also cheaper.

This method can be worked satisfactorily under favourable conditions, but fumigation must be stopped on break of season. If done in wet weather, a slight leaf drop occurs. Lemon trees particularly proved subject to injury if fumigated in damp weather.

One of these machines has been purchased by the Gosford District Citrus Packing House Ltd.

The Fruit and Vegetable By-Products Ltd., Gosford, who are the pioneers of the citrus oil industry in



New method for fumigating citrus trees. "Blower" on wheels for discharging calcium cyanide. (See description on this page.)

the tests in the Murrumbidgee Area was home made, consisting of a small "Buffalo" blower mounted behind a hopper (on which a brush revolves to keep the powder from clogging), and fitted with a small "gate" by means of which the supply can be cut off. From this extends a length of rubber hose.

The whole was mounted on a pair of light wheels, and can be drawn by hand from tree to tree.

For convenience a container for the stock of calcium cyanide, and a small set of scales are carried on the truck.

The calcium cyanide is weighed, and the necessary charge placed in the hopper; the end of the hose held under the skirt of the tent and a few turns of the handle of the blower

Australia, commenced operations two years ago, manufacturing essential oil for essences and perfumery. Satisfactory progress is reported. Difficulty is being experienced in keeping up with the demand. The present plant is capable of treating over 50 tons of citrus fruit per week.

TWEEDVALE SUBSCRIBER, PLEASE NOTE.

A subscriber at Tweedvale, South Australia, has sent us postal notes for 8/6 (5/- and 3/6), but the name of the sender was omitted. Will our Tweedvale friend kindly write to us on this matter.

THE IMPORTANCE OF MANCHESTER AS A DISTRIBUTING CENTRE.

(By Captain W. J. Wade.)

There are good grounds for the claim that the Port of Manchester can serve more than one-half of the population of England and Wales more economically than any other port, for its geographical situation as a centre of distribution is unique since the Manchester Ship Canal—which is about 36 miles long and 28 feet deep—enables ocean-going vessels to convey produce and manufactured goods direct into or from this great centre of industry.

Direct trade with the United States, Canada, South America, India, and Mediterranean ports has increased by leaps and bounds since the creation of the port, but the primary producers, exporters and importers of Australia and New Zealand have so far failed to take full advantage of the saving in transport and distributing charges which direct trade with Manchester would effect.

As an example of this, nearly 60 per cent. of the meat distributed through the Manchester Wholesale Meat Market during recent years was imported from overseas—much of it from Australia and New Zealand—but although it appears almost incredible the greater part was landed at the ports of London and Liverpool, and transport and other charges of approximately £3 or 25/- per ton respectively, were incurred for its conveyance to Manchester by rail or road,—to say nothing of the loss due to deterioration caused by manifold handling and unsatisfactory transport.

In explanation of largely increased trade with Manchester, the general manager of the United Fruit Companies of Nova Scotia stated in his annual report:—

"This market was the most consistent throughout the entire season. Apples were handled much more rapidly and less adjustments were necessary—brought about by the fact that the facilities at Manchester are so much better than at any other English port.

"They certainly have a very wonderful organisation, and we believe this is one reason why Manchester is becoming recognised as one of the best distributing ports in England.

"Liverpool, from the standpoint of marketing our fruit, ranks second, while Glasgow is spasmodic, and in London practically until the close of the season, much lower prices ruled than on any of the other markets."

As will be seen on reference to the advertisement elsewhere in these pages, a considerable demand is anticipated for Manchester tonnage, and a number of steamers have been listed to load at Hobart and other Australian ports during the 1924 season.

Captain Wade, permanent representative of the Port of Manchester—whose address is No. 8 Bridge-street, Sydney—will be pleased to answer enquiries and furnish all available information in regard to steamship services, the facilities of the port, names of selling brokers, and particulars as to port and distributing charges.

Collapsible Case.—The Angle Brace collapsible case has been found very suitable for fruit packing. The cases are so constructed as to be capable of being used over and over again. The design is ingenious, and is appreciated by fruitgrowers who are using these particular cases. The Angle Brace collapsible case has also been found serviceable for packing all forms of merchandise for country and interstate trade. It is a New Zealand invention. The Australian representative is Mr. S. F. H. Laws, 3 Kelvin Grove, Armadale, Vic., and the cases are being manufactured by Messrs. John Westwood Pty. Ltd., Clarendon-street, South Melbourne, V.

MEASURING SPRAY MIXTURES.

Difference between Imperial and American Gallon Measures.

A reader who has been using American Tobacco Extract "Black Leaf 40" reports that he mixes his sprays according to the gallon measure on the tins, with unsatisfactory results.

It should be noted that the Imperial gallon is twenty-five per cent. greater than the American gallon. In other words, four Imperial gallons are equal to five American gallons.

Care of Your Orchard.

An interesting booklet, under the above title, is to hand from the Vacuum Oil Co. It comprises 40 pages of practical information for the orchardist, and deals particularly with the controlling of insect pests and scale diseases by means of oil spray. A number of illustrations, showing manner in which the various pests affect fruit trees, together with a description of same, are also included. Copies are obtainable from the company's offices in all States on application.

THE GREATEST TROUBLE

people have who suffer from Rheumatism or Neuritis is in preventing a return of the attack. It comes back year after year despite all the rubbing and ordinary treatment they undergo. This is because they do not drive the dregs of the complaint, which is a poisonous acid in the blood, from the system. No amount of rubbing will do that, the trouble is in the blood. A treatment for Rheumatism or Neuritis that aims at driving out of the system, the cause of the complaint is certainly common-sense. People who have used A.M.S.—a blood purifying medicine—acting through the Stomach, Liver and Bowels—find that its action not only eliminates the cause of Rheumatism and Neuritis from the system, but fortifies it against future attacks. Therefore, try A.M.S. It is the medicine which makes you feel strong and well. Sold by all chemists and country storekeepers at 3/-, by post 3/6. Manufactured by T. A. Dickson, Chemist, Geelong, Vic.

Classified Advertisements.

Wanted and For Sale.

Advertisements under this heading, which cannot exceed one inch, will be classified as far as possible.

Prices are as follows:—

Casual Advertisements, one or three months—9d. per line of six words. Nine lines to the inch.

Contract Advertisements, six or twelve month, 6d. per line of 6 words, 9 lines to the inch.

Send cash with order.

BOOKS.

FRUIT WORLD ANNUAL AND TRADE RECORD, 1923 edition available. 3/- posted—9 Queen Street, Melbourne.

PRUNING FRUIT TREES, By G. Quinn. Illustrated. 4/9 posted—"Fruit World," 9 Queen Street, Melbourne, Vic.

FRUIT CASES.

I CAN supply Fruit Cases, any quantity. Prices reasonable. Write for quotations. **ALF. BLOOM**, Fruitgrower and Case Maker, Mitcham, Victoria.

LIME.

AGRICULTURAL LIME, ground fine, no lumps, excellent results. Truck loads promptly.

SPALDING LIME CO.,

LARA,

Victoria.

WE BUY LEMONS

Green Citrons and Shaddocks, Seeding Oranges, Tomatoes, Cherries for crystallising, Loganberries, Raspberries and Strawberries, Passion Fruit.

C. M. BROOKE & SON,
Whiteman St., South Melbourne, Vic.

ORCHARD FOR SALE.

APPLE ORCHARD. 5,000 TREES Splendid Crop showing. Seven-roomed Stone House, good out-buildings, all plant. Permanent water. River flats for Potato and Onion growing. Situated in Adelaide Hills. Can be subdivided if necessary.—**A. B. HARVEY**, 13-14 Industrial Building, King William St., Adelaide.

WANTED TO PURCHASE AT ONCE.

DRIED FRUIT STEMMER AND GRADER

Reply, G.N.H., c/o Walker & Wellford, 396 Flinders Lane, Melbourne, stating make, capacity, H.P., dual or single blast.

Cherry Growing in Australia.

Is It Declining?

Practical Suggestions and Useful Cultural Hints from "Fruit World" Readers.

THAT COMMERCIAL CHERRY GROWING is on the decline was a statement made by a "Fruit World" correspondent in the Dandenong Ranges, Victoria. Continuing, it was stated that as clearing progresses, the Cherry trees lose that shelter which is so necessary.

Again, is stock at fault? The seedling stock is reported to be usually destroyed by borers before it comes into bearing. The Kentish is most favoured, but the suckers entail no end of labour, season after season. Mazzard and Myrobolan stocks are not favourably commented on, and are therefore scarcely planted.

What is wanted is a stock that (like the Peach) is borer proof, and yet will produce satisfactory crops. Gumming is a troublesome disease.

Our correspondent seeks information as to the best stock, and asks whether American experience would be helpful; what stock do they use there, and is the bud or graft used in propagating?

Our inquirer continues—"I have grubbed out 1½ acres of Cherries this season, and more will follow. I have several acres ready for Cherries, but am not going to plant until I hear of something satisfactory."

Mr. A. F. Thiele, a well-known and expert fruitgrower and horticulturist, of Doncaster (V.), writes, in reply:—

"In this district Cherry growing has become quite unprofitable, for various reasons, one of which is the opening up of the country, which causes the cold winds to interfere with the setting. Another reason is that as the crops are now very much lighter than formerly, and labour is so much higher, it does not pay to gather them.

"I never did believe in working Cherries on seedlings or any of those strong growing stocks, because the trees grow too large and seem to spend all their energy in making wood.

"I have always found the old Kentish stock to be the best one to use, though it throws suckers; but if the land is not ploughed too deeply, and not so many roots cut, the suckers can be easily kept in check.

"I can not say which stock the Americans use, or under what conditions they grow them. A cool climate, no doubt, is in their favour. I have always found them to do better on a poor loamy soil than on a deep rich soil."

Mr. Alf. E. Thiele, Doncaster, writes:—

There are several reasons why Cherries are not being replanted here. The first and probably most important factor is the opening up of the country. The Cherry requires shelter and new land. When the natural timbers are cleared away, the land becomes dryer, and artificial irrigation does not seem to suit the Cherry.

The second reason is increased cost of picking, owing to higher wages.

Soils and Manuring.—Light loam has proved the best soil for Cherries, with light dressings of stable manure or complete orchard manure.

As regards climatic conditions—cool districts are best, with not too much rain during ripening.

Varieties.—Twynford Biggareau, Bedford's Prolific, Burgdorff's Seedling, Margaret, Florence, Napoleon Biggareau, and some newer varieties which have come in since I gave up Cherry growing.

Experience in N.S.W. Quoted.

Messrs. John Brunning & Sons, Fruitgrowers and Nurserymen, of Somerville, V., write:—

"As you know Young (N.S.W.) is one of the largest district for Cherries in Australia, and we are indebted to Mr. S. A. Thornell, inspector of that district, for the following information, his report may be wholly relied upon, as he has his own orchard, as well as the experience gathered from the successful orchardists of that district, we put the following questions to him:—

(1) Do Cherries require shelter?

Answer—"In my opinion they do, and it is noted that the most sheltered orchards this season are carrying the heaviest crops."

N.B.—This has been a season of exceptionally cold changes."

(2) As clearing of land progresses, does it affect the Cherry orchard?

Answer—"I should again say that it does; especially where exposed thereby to hot blasting winds."

(3) Does the seedling Cherry stock become destroyed by borers before the trees bear?

Answer—"Borers are troublesome in some orchards, especially if adjacent to wattle trees. Cannot say that the seedling stock is more prone to attack than other stocks."

(4) Do you know the Myrobolan as a Cherry stock?

Answer—"No. I have never used it, nor heard of it being used. The Mahaleb is the nearest approach to it, and only suits a very few varieties here."

(5) Is there a stock borer proof?

Answer—"I do not know of any. "Mahaleb," which was not as badly attacked as Mazzard or Kentish."

(6) Gummosis?

Answer—"This is always worst here in a wet season if the previous season has been very dry and hot. The most effective method is to scarf the tree with a keen bladed knife, from ground level, and continue upwards along main limbs on two or three sides. It is sometimes necessary to again follow up the next season by lancing between the previous scarfs. Have saved hundreds of trees by this method. (N.B.—The cut must not be made into the wood, or injury will result to the tree.)"

(7) Do they in America graft or bud for propagation?

Answer—"I am not aware which method is favored there, but at Young, grafting is preferred—being more reliable."

Soils.—The most suitable soils at Young are just off the heavy red; generally, a sandy loamy top soil, with a red or yellow subsoil about 9 to 15 inches below is best. The heavy red soils produce the largest trees, but not the heaviest crops.

Manuring.—Little or no manuring is done here. Some are trying green cover crops, such as barley—planted about March, and ploughed in about end of July.

Pests.—The worst pests are shot-hole fungus, and San Jose Scale. Lime-Sulphur in July is a good remedy for both. Bordeaux should be better for the fungus. Personally, I prefer to spray first with Lime-Sulphur, and then oil emulsion if San Jose is very prevalent.

Victorian Experience.

Our own remarks, continue Messrs. Brunning & Sons, in addition to Mr. Thornell's report, are—

Pruning.—Cherries do not require pruning, except to form the tree for the first four or five years; subsequently the only other cutting would be where there are too many limbs.

The method to overcome gumming is to cut off the limb to where there is a strong side shoot, this being done to divert the sap quickly to the new limb.

Drainage.—Cherries, like all fruit trees, require the land well drained. This applies more so to our Victorian climate.

Stock.—Myrobolan stock—we have not, in our 58 years' experience, met with this stock as a stock for Cherries.

Some growers favour Mazzard on some soils, but the general majority favour the Kentish. The sucker problem being the worst with the Kentish stock—but the bearing capabilities of the Kentish stock are proved beyond question.

In the Cherry districts it has been found that Kentish ripens the crops a few days earlier than Mazzard, but the tree on Kentish is not so large as those on Mazzard. So far, Victorian planting for cropping capacity and early bearing, the Kentish is the best.

Pollenisation, too, plays a big part in the cropping capacity of the Cherry, so care must be taken to plant varieties which will pollenise, otherwise planting of blocks of Cherries without regard to pollenisation will result in failure.

The trouble in a great majority of failures is the wrong method of pruning—cutting the trees indiscriminately results in gummosis setting in, and consequently the tree and crop become a failure.

Mr. F. A. Bloom, an experienced Cherry grower, of Mitcham, Vic., writes:—

"My experience in Cherry growing is as follows:—The future of Cherry growing promises very well where they can be grown; they only seem to grow to satisfaction in virgin soil, and the kind of soil that suits them best is light loam (gravelly)—on a well drained easterly slope in preference.

The best varieties to grow in the vicinity of Melbourne are Early Guigne (not Purple Guigne, which is found to be a shy bearer), Burgsdorf's Seedling, Twyford Biggareau, Early Lyons, Black Biggareau, Bedford Prolific, Florence, and St. Margaret. The best manure I know of is bone and super, applied early in spring.

The chief diseases and pests are—Brown Rot fungus and Cherry Slug. Spray with Lime-Sulphur for Brown Rot when fruit is formed, and arsenate of lead for Slug.

Mr. Geo. W. Peart, Manager for C. J. Goodman's Orchard and Nursery, Bairnsdale, Vic., writes:—

The difficulty in regard to Cherry growing is a very real one, and I am personally of opinion that soil and stock have more to do with success or failure than everything else combined.

As to the Soil, Cherries cannot be successfully grown commercially if the right types of soil are not used for planting. On the whole, these real "Cherry" types of soil are not to be found in hot climates.

For example, it is impossible to secure a plot which will grow both Cherries and citrus fruit to perfection—the Cherry requires a winter season, wherein it can remain absolutely dormant for some considerable time.

Cherries thrive in free, deep soil, having a moisture retentive quality. Without a regular supply of moisture, the Cherry will never succeed anywhere.

Then the question of Stocks brings along heaps of argument. The real Cherry stock (Mazzard, Mahaleb and

Kentish) will always be susceptible to the borer, because the nature of these Cherry woods is such that the borer has a very comfortable home to work in.

As to the use of any other variety of fruit stock for the Cherry, it is

T. STOTT & SONS Fruit Merchants

Established 1882

A Trial Consignment solicited from Growers in all States.

Prompt Settlement.

11 WESTERN MARKET,
Melbourne

TASMANIA

We are the Leading Australian Firm of
FRESH FRUIT EXPORTERS,
JAM MANUFACTURERS (IXL Brand),
FRUIT CANNERS, HOP FACTORS (owning the largest cool stores for this purpose in the Commonwealth).

Supplies of Corrugated Straw-board, Genuine Sulphite Paper, Nails and best Packing Materials available at all times.

Sole Distributing Agents for the Southern Tasmanian Associated Manufacturers of Evaporated (dried) Apples.

Agents for—
Federal Steam Navigation Co. Ltd.,
Scottish Shire Line of Steamers,
Osaka Shosen Kaisha, London
Assurance Corporation.

Correspondence Invited.

H. JONES & CO. LTD.,
HOBART

Fruit Shipments
LONDON
Liverpool and the Continent

W. D. PEACOCK
& CO.

24 Martin Lane, Cannon St.
LONDON, E.C., 4
AND HOBART, TASMANIA

Solicit Consignments

The High Standing and Long Experience of this Firm is a Guarantee that the Best Interests of Consignors will be conserved.

doomed to failure right from the start.

Growers must necessarily stick to Cherry stocks for Cherry trees, and make the best of them.

The Kentish is troublesome with suckers where the ploughing is deep enough to cut the feeding roots—otherwise it is a good stock.

As to the Mazzard and Mahaleb, neither is looked upon with a great amount of favor, but the Mazzard is certainly the most largely used of all known stocks for Cherries.

The complaints about the non-bearing of Cherries worked on the Mazzard stocks are mostly due to two causes:—1st, Heavy pruning; 2nd, the non-fertilisation of particular varieties. With more skilled treatment in the pruning and the inter-planting of varieties, I believe the Cherry growing industry can expand. In these days of "machine" cultivation, I reckon Mazzard is going to remain the most largely used Cherry tree stock.

Gummosis and Die-back are the most troublesome diseases in Cherry-growing—Pear Slug, etc., being easy to control.

As to what the Americans are using, latest figures from the States are bulking largely in favor of the Mazzard stock. Young trees out here in Australia are propagated in the nurseries both by budding and grafting.

DISEASE IN CHERRY TREES.

Starlings are Destructive.

Mr. E. Weitnauer, Jr., Batesford, nr. Geelong, writes (21/11/23):—

There is a mysterious disease in our Cherry trees. Trees, both young and old, are dying in hundreds each year. One of our leading growers told me last week that he had to grub out 132 trees since last season; every grower is losing in proportion. Some trees that I personally picked two and a half cases from last season, beautiful Cherries (Margarets) were looking well in pruning season; flowered, and are now quite dead.

It seems to me that the officers of the Department would serve the growers well if they took a visit to this district (all round Geelong) to ascertain the cause.

Starlings, as usual, are playing havoc and all sorts of devices are being used to frighten them, but the young birds seem to have no fear.

SPIRIT FROM APPLES.

Penfold's Need 2,000 Tons of Apples.

Messrs. Penfold & Co. state they are prepared to purchase 2,000 tons of Apples if the Federal Government will grant permission to distil the Apples and convert them into spirit.

In a letter Mr. H. L. Penfold Hyland states that the Government permits Apple spirit to be imported into the Commonwealth, but places insuperable difficulties in the way of Australian distillers for the work to be done here.

Sell Your Peaches!

Are you very serious in your endeavour to obtain the **BEST PRICES** for your fruit?

If you are, you will see that you put up your fruit--at a **MINIMUM OF EXPENSE**--in an attractive manner, to **COMPEL PEOPLE TO BUY**.

— **YOU CANNOT DO THIS** —

without a Fruit Grader, which will do the work of three or four men, thereby saving you **NEEDLESS WAGES** and giving you results impossible for men to arrive at, viz., evenly graded fruit, which is more quickly packed at a **SMALLER COST**.

If you desire to work in the **Cheapest and Quickest** manner, use a Fruit Grader.

YOU WANT THE BEST!

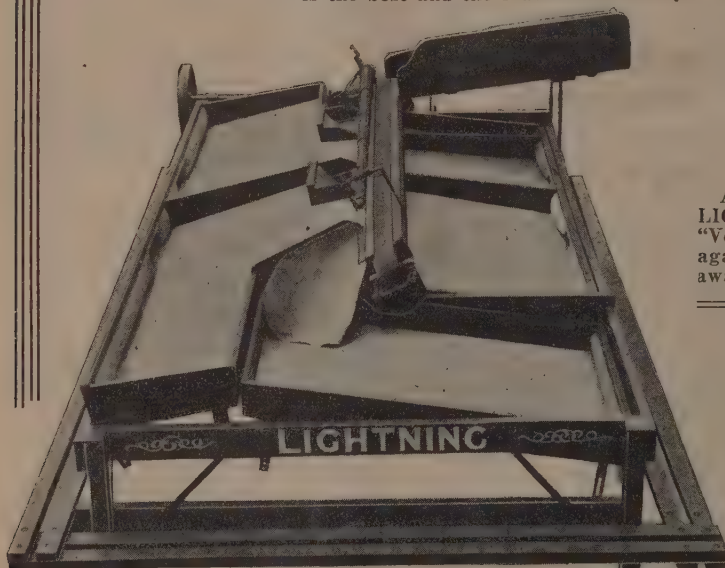
The "Lightning" Fruit Grader

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Subscribers' Payments Received.

The following are the subscriptions received from November 20th to December 20th, 1923. The month quoted in parenthesis indicates to what date the subscription is paid. These are exclusive of the subscribers who have paid to local agents or to our offices in the various States:—

F. J. Allsopp (June, '24), W. R. Archibald (Nov., '24), E. Ashby (Oct., '24), Aust. Fruit & Produce Co. (Oct., '24), H. M. Alexander (June, '24), F. Albaro (April, '24), R. J. Benton (Oct., '27), F. Butler (Dec., '24), N. J. Boot (Nov., '24), W. J. Barnett (Dec., '24), A. W. Brown (Nov., '24), W. Clegg (Oct., '25), A. W. Cornish (Aug., '24), T. Cox (Sep., '25), H. A. Crase (Oct., '24), O. Coleman (Nov., '24), W. A. Cumming (Nov., '24), Deale Bros. (May, '24), A. Elliott (Nov., '24), C. Eipper (Nov., '24), J. W. Earl (Nov., '24), W. C. Elder (Dec., '24), R. W. Evans (Nov., '24), W. Farrar (Sep., '24), W. F. Ford (Sep., '23), H. J. Francis (Aug., '24), Leonard Friend (Sep., '24), H. A. Fryer (Aug., '23), R. Glendinning (Sep., '24), Arthur W. Gibson (Oct., '24), G. A. Gilmour & Son (Oct., '24), H. Gorham (Sep., '24), C. F. Grimble (July, '25), A. D. C. Hetherington (Aug., '24), R. Horner (May, '24), W. F. Hutchinson (Aug., '24), F. J. Jamieson (Sep., '24), H. M. Jones (Sep., '24), J. Jardine (July, '27), J. Kibbey (Sep., '24), E. Kennedy (Nov., '24), A. Lauer (Aug., '24), P. Lawrey (Sep., '24), A. Lenne (Sep., '24), Lourensford Estate (Aug., '24), A. J. Lenehan (Oct., '24), H. T. Lee (Nov., '24), A. Laytham (Oct., '24), J. Martin (Nov., '24), L. Meggitt (July, '24), H. B. Martin (Sep., '24), M. Maughan (Aug., '24), J. Morgan (Oct., '24), N. More (Nov., '24), J. W. Melville (Nov., '24), B. A. Martin & Sons (Nov., '24), A. W. Marshall (Nov., '24), E. L. Meggitt (Dec., '24), G. S. McCarthy (Nov., '24), E. McCurs (Nov., '24), A. McDonald (Dec., '24), E. Naughton (Nov., '24), C. M. Newlands (Feb., '24), P. Nash (June, '24), O'Hanlon Bros. (Oct., '24), Mrs. A. I. Pitts (Sep., '24), Pickford's (Colonial) Ltd. (Aug., '24), Piper (Oct., '24), R. J. Piper (Oct., '27), A. Ragless (Aug., '24), Renmark Fruitgrowers' Co-op. Ltd. (Oct., '24), H. F. Richardson (Oct., '24), Robinson Bros. (Sep., '24), T. Russell (Oct., '24), G. Roberts (Nov., '24), W. Rawlings (Oct., '24), W. H. Syme & Co. (Sep., '24), L. Strugnell (Nov., '24), D. G. Stark (Nov., '24), R. A. Smythe (Aug., '24), S. C. Sellars (Nov., '24), H. F. Seymour (Nov., '24), T. V. Tamcan (Nov., '24), G. Tarr (Nov., '24), John Thompson (Oct., '24), H. M. Thomas (Nov., '24), K. H. Todd (Dec., '24), Waigh & Sons (May, '24), C. Wallace (April, '24), Whiting Bros. (Oct., '24), P. J. Worthington (Dec., '23), W. Young (Oct., '24).

NEW EVAPORATING METHOD.

Developing Australian Industries.

Mr. A. F. Spawn, who rendered service to Australia thirty years ago in connection with agricultural development, has returned from an extended visit to U.S.A., England and the con-

tinent. Mr. Spawn has a patent method for dehydrating fruit and vegetables, which system not only does the work efficiently, but has the merit of being relatively inexpensive. Samples have been submitted of dried Bananas, Coconut, Lemon peel, Guava; Onion, Pumpkin and Sweet Potato, and many other products.

Regarding the Sweet Potato, it is stated there is room for the development of a large industry in Australia. Flour made from dried Sweet Potatoes is very nutritious.

Bread made from two-thirds wheat and one-third Sweet Potato flour is wholesome, tasty, and possesses the remarkable quality of remaining moist and eatable even though a week old.

Australian Fruit Export Trade.

Messrs. T. J. Poupart Ltd. are developing increased outlets for Australian fresh, dried and preserved fruits in Great Britain and Europe.

The vast magnitude of the trade in fruits in England is very inadequately realised by producers in Australia and New Zealand. Apart from its home-grown supplies, the importations reach the huge figure of £36,000,000 annually. There is a bigger population in London alone than in the whole of Australia.

If these thoughts be allowed to sink into the mind the next thought is easy—that the handling of this immense volume of trade requires careful organisation.

Prominent in the fruit handling business is the business of T. J. Poupart Ltd., which claims to be the largest firm of commission Fruit Salesmen in Great Britain. Their business is commission only: no fruit is bought. They sell by private treaty, believing this to be more advantageous to growers than selling by auction.

Mr. T. J. Poupart commenced business about 28 years ago in quite a modest way, and by ability developed a splendid trade. The business has now been made into a private limited company, of which the only members

are Messrs. John Poupart and William Ravenhill, both household names in the trade in England.

Apart from these headquarters in Covent Garden, there is a branch at Spitalfields Market, two at Liverpool, one at Southampton and selling branches or agencies at Hull, Glasgow and Bistol, and quite recently at the request of some of their senders, who are also interested in dried and canned fruits, fruit pulp, etc., they have opened premises right in the heart of the wholesale grocery trade at Love Lane, Eastcheap, London.

The policy of the firm in connection with sales, has always been to have salesmen who specialised in the sale of certain fruits, for example, the salesman who sells Oranges (received from all quarters of the globe) always sells Oranges, and thus he becomes a specialist in handling citrus fruits. He knows his clients, their requirements, and is therefore able to effect distribution on what might be termed scientific lines. The same can be said of any other varieties of fruits that are handled. These abilities in salesmanship and straight dealing have brought about the rise of the firm to the prominent position it now holds.

Quite recently the firm's Special Commissioner has been visiting all the important Continental, Scandinavian and other cities of Europe, appointing agencies for the distribution of produce, to and from these countries. Very hopeful are the views held by the firm as to the help that this source of distribution is going to be for the distribution of Australian fruits.

Australian shippers who are seeking new outlets for their products will do well to bear in mind that the progressive firm of T. J. Poupart is always alert to this matter, and is definitely pushing to increase the trade in Britain and Europe for Australian trade in fresh, dried and preserved fruits.

Free Pocket Diaries.

The Gerrard Wire Tying Machines Pty. Ltd., Hawke-street, West Melbourne, Vic., have issued a pocket diary and calendar for 1924, enclosed in a leather case. Orchardists requiring a copy can obtain same free on request to the above address.

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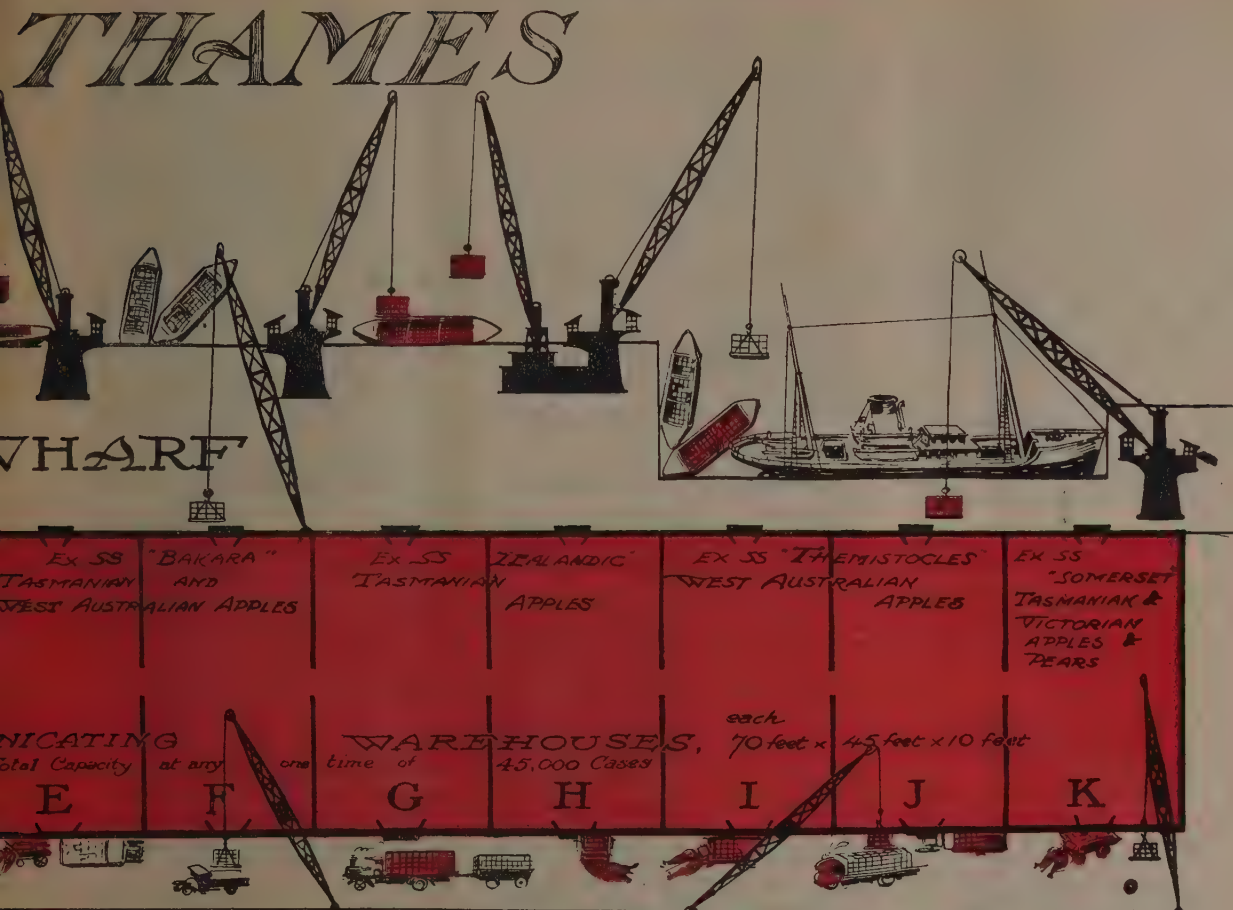
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Stocks for Apple Trees

ARE SEEDLING STOCKS SUITABLE?

Practical Growers and Experts Favor Blight-proof Stocks.

Owing to suggestions recently put forward recommending seedling stocks for Apples in place of the Northern Spy (blight proof) stock, the opinions and experiences of practical growers have been sought.

The letters from our correspondents on this subject are published herewith, the consensus of opinion being strongly in favor of Blight proof stocks, the best of which so far being the Northern Spy.

An investigation into the Apple stock question is recommended.

Mr. James Lang Favors the Northern Spy Stock.

The opinion of Mr. James Lang, Senn., of Harcourt, Vic., one of the most noted horticulturists in the Commonwealth, is always worthy of close attention.

Mr. Lang writes:—

The Editor "Fruit World."

Sir,—My attention has been drawn to the suggestions that have been made recommending seedling stocks for Apple trees in place of the Northern Spy stocks.

It is stated that despite the fact that Woolly Aphis develops on the roots of the Apple trees on seedling stocks, the trees remain healthy, and bear larger crops than those on the Northern Spy.

This is entirely contrary to my experience extending over nearly sixty years.

I have always found that seedling Apple stocks become affected with the Woolly Aphis from their earliest stage, when in the seedling beds, a very small percentage only, being clean and fit to use as stocks, and these soon become affected and die out.

Apple trees subject to Woolly Aphis when worked on blight-proof stocks are still liable from the junction of the graft upwards, the stock remaining perfectly immune.

Many growers find it a difficult matter to keep the branches clean and free from the Woolly Aphis. How much more difficult it would be were the roots also affected!

As it would be impossible to reach the roots by spraying, the tree would then soon die, as was the case with thousands of trees planted in the early days before blight-proof stocks came into use.

With regard to the statement that trees on seedling stocks are more healthy and bear better crops than those on blight-proof stocks,—This is not according to facts. At Langdale Orchard, Harcourt, Victoria, there are

trees on blight-proof stocks that have been planted from ten to fifty years, giving as large an output of fruit per acre as any Apple trees on seedling stocks in the Commonwealth.

From my long experience I would strongly recommend all fruitgrowers to plant Apple trees on blight-proof stocks.—Yours, etc.,

JAMES LANG.

Harcourt, V., 3/12/23.

Views of Mr. A. F. Thiele.

Another prominent horticultural expert of high standing is Mr. A. Fred. Thiele, of Doncaster (Vic.) On the subject of stocks for Apple trees, Mr. Thiele's views are as follows:—

"It has always been my belief that we should have stocks to suit the localities, and also the varieties.

"The Northern Spy may suit some varieties in certain localities.

"If we could get a seedling stock that would be fairly free from Aphis and a strong grower, I think it would be the better stock, though when one raises trees from seeds they are not regular: some will have blight, some will be weak, and the nurseryman would have to throw a lot of his trees away after he had grown them.

"There are many other resistant stocks which would perhaps suit many varieties, but they are not used because they will not root freely like the Spy.

"We should have an experimental orchard for stock testing, the same as the farmers have a farm for testing grain crops."

Chief Orchard Supervisor's Opinion.

Seedling Stocks Unsuitable: Investigation Favored to Improve Northern Spy.

Mr. P. J. Carmody, Chief Orchard Supervisor, Department of Agriculture, Vic., writes as follows:—

Re Apple stocks—there are very few trees in Victoria, at the present time, worked on seedling stocks, so that it is difficult to draw comparisons between these and those worked on the Spy.

A few years ago a grower at Seville (Dandenong Ranges) planted out some acres of Apples on seedling stocks, but so unsatisfactory did they prove, chiefly owing to the havoc caused by Woolly Aphis, that he grubbed them out when they were nine or ten years old.

Individual trees on seedlings have been met with occasionally, but,

though subject to the same treatment as their neighbours on the blight-proof stock, were much inferior. In some of the old gold digging towns old trees on other than Spy stocks and neglected for years, are in a fair state of preservation.

The neglected condition to which they were subjected was in their favor as regards Woolly Aphis attack as it lessened their growth and rendered the insects' food supply more difficult of attaining.

I certainly should not recommend seedling stocks promiscuously raised for "working" Apples on, nor can I understand anyone intimate with the fundamental principles of plant breeding taking up such an attitude. The variability of seedling stocks in vitality, in constitution, and in disease resistance, in my opinion, precludes the adoption of such a stock for the Apple.

I am in favor of an investigation into the stock question, as, no doubt, an improvement on the Spy stock would be discovered and its characteristics could be stabilised by the methods adopted in the case of the latter.—Yours faithfully,

P. J. CARMODY,

Chief Orchard Supervisor, Vic.,

4/12/23.

"Stocks Must be Blight-proof."

Mr. E. E. Pescott, Government Pomologist (V.), says Northern Spy best Apple stock known so far.

The Editor, "Fruit World."

Sir, I have never received any evidence in all my experience of Australian orchards, that seedling stocks for Apple trees possess any superiority over the Northern Spy stock. In Tasmania, I have seen many old trees on seedling stock, the butts of which were huge, and a mass of swollen hard woody tissue as a result of Woolly Aphis attacks. I have seen the same in Victoria.

Many of these trees are accredited to be good bearing trees. What if they are? They are only the "survival of the fittest."

Whenever I have seen any of these trees, I have always asked the question, "There were ten, where are the nine?" The inevitable answer is "Dead."

It is absurd to say that this aggregational mass of root tissue does not interfere with the sap movement, or with the bearing abilities of the trees. From a botanical standpoint, the less interruption there is to the sap-flow, the better will the trees do their work.

The irregularity of growth of seedling plants is a distinct bar to their general use, as stocks for Apple trees. I am not wedded to the Northern Spy as a stock. If we can get a better

stock, let us get it: but until we do—well, let us keep what we have, for it is good.

I think of the millions of Apple trees in Australia, and of the general success of large numbers of these trees. I think of the many fine orchards I know, young and old, all on blight-proof stocks, the trees bearing heavily. I think of those fine Apple trees at Bacchus Marsh, bearing over twenty bushels per tree: and I am more than ever convinced that where Apple trees have failed, the cause can not be debited to the stock, but to unsuitable soil conditions.

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Reference—Satisfied Growers
in all States.

I certainly do not recommend the use of seedling stocks for Apple trees; I recommend investigation, so that we may find other blight-proof stocks, but let our stocks be always blight-proof.—Yours, etc.,

ED. E. PESCONT,
Pomologist, Department of Agriculture, Vic., 5/12/23

APPRECIATION.

Sandford, Tas,
20/11/23.

We appreciate the "Fruit World," and wish you every success with same.—D. C.

STOCKS FOR APPLE TREES.

Northern Spy Stock Favored.

Seedlings Condemned in Tasmania.

Mr. G. McE. Duncan, of the Enid Nurseries, Ivanhoe (Vic.), who has had considerable experience in fruit-growing as well as nursery work, recently returned from Tasmania, bringing with him roots of Apple "seedlings," same being disfigured and swollen through attacks of the Woolly Aphis.

From his wide practical experience, Mr. Duncan is positive that it is vital to the continuance of the Apple growing industry for the trees to be worked on the blight proof and not seedling stock.

The specimens of the trees brought by Mr. Duncan came from the Tasmanian Nursery of Mr. Frank Walker.

On the subject Mr. Walker, nurseryman, Launceston, Tasmania, writes under date, 7/11/23:—

"Re Apple trees brought under your notice by Mr. Duncan. These trees are budded on to seedling (Malus Bacata) stocks as imported by our ex-fruit expert, Mr. J. M. Ward. These trees have been isolated from any other Apple or fruit trees, and have been sown and grown on virgin land.

"When the scare about the Northern Spy stock was being discussed, I procured a supply of this seed with the view of a probable demand taking place for Apples on seedling stocks. It is needless for me to inform you that I could not offer such blight infected trees, consequently I abandoned the idea of growing trees on this stock.

"My experience as a fruitgrower is that I prefer the Northern Spy stock for the majority of Apples. There are a few sorts that upon our soil do not do well on the Spy and do well on the seedling stock. These sorts are Scarlet Nonpareil, Cleopatra and Duke of Clarence.

"The cause of many failures here with the trees on Northern Spy stock is, in my opinion, not due to the stock, but the planting on unsuitable land. In the subsequent treatment which they have received the majority of the trees have starved.

"The trees grow magnificently for about five years, and where not manured they gradually cease to grow, becoming a mass of fruit spurs. I have seen ample proof of my contention, as one orchard I have had under observation was, for years, in a very unsatisfactory state, and appeared doomed. By change in the method of cultivation, turning under cover crops and giving a liberal dressing of manure, this orchard is to-day in a very satisfactory condition, producing ample yearly crops.

"To those who are undecided as to what stocks to procure, we would advise them to apply to Professor Hutton, of the East Malling, Kent, Eng-

land, Research Station, where most exhaustive tests of all kinds of known stocks for Apples are being tried out over a number of years, and the reports, as issued by the Department, are very conclusive and entirely in favour of the vegetative stock.

"During my recent visit to England I visited this station, also the R.H.S. Experimental Orchard at Wisley, where it is patent to any observer to note the results which have been carefully tabulated. Nurserymen in England, who grow Apple trees would on no account touch the seedling stock; on the other hand the American orchard trees are practically all on seedling stocks.

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TASMANIAN AGENT

The Port Cygnet Fruitgrowers'
Co-Operative Association
Ltd., Cygnet

"There is room in Australia for much research in connection with fruitgrowing. It is advisable to point out that (in Tasmania, at any rate) the buyer does not always get what he expects when he buys seedling Apple trees, as some nurserymen here do not raise them from seed, but root graft portions of seedling roots, which surely defeats the chief purpose for which the seedling stocks are being recommended.

"There are other stocks being used here for Apples besides the Northern Spy, and they are absolutely blight-proof, and are very promising, and will be heard of in the future."

THE VALUE OF MANURING.

Nitrate of Soda Appreciated.

When sending his report re crop prospects, Mr. E. Weitnauer, of Batesford, near Geelong (V.), adds the following (under date, November 21st):—

I have personally tested the value of Nitrate of Soda on a portion of my garden, and cannot speak too highly of it. Combined with other fertilizers three rows of about uniform size trees were selected with check rows between.

First Plot was treated on 13th July with Basic Super., 4 lbs. per tree, Sulphate of Potash, 1 lb. to tree.

Second Plot was treated with Basic Super 4 lbs. to tree, Sulphate of Potash, 1 lb. to tree, and 2½ lbs. of Nitrate of Soda in two applications (2 lbs. on 13th July, and ½ lb. Soda 21st October).

So far, the No. 2 Plot stands far ahead of Plot One. The fruit having set fairly equally, but the leaves on Plot 2 are larger and deeper green color, fruit much larger and new shoots, 3 to 4 inches longer. If No. 2 Plot continues to thrive until the finish as it has so far, I should not hesitate to say my returns will be nearly double as regards number of cases of fruit.

This applies to Plums, Cherries, Apples, Pears and Peaches, but the latter have not responded nearly so well as the first four varieties.

I have also another plot of 3 rows same as above, treated in July, with three parts super., 1 bone; 4 lbs. to tree, which look better than the unmanured ones, but nothing approaching Plot 2.

Useful Implements.

Mr. Dan. Harvey, of Box Hill, gave a good gathering of growers a demonstration of his new one-way disc and attachments at Mr. Winter's orchard, Grovedale, recently, which greatly pleased the growers, being a useful machine in both hard and sandy soils, easy to manipulate, and simple to adjust. Several machines were sold, and several orders were given for future date. After the gathering was satisfied with many and severe trials given, afternoon tea was served and appreciated.

THE TRACTOR ON THE FARM.

A South Australian's Experience.

At a recent meeting of the Arthurton branch of the South Australian Bureau of Agriculture (as reported in the "Journal of Agriculture"), Mr. M. T. Hynes read a paper on this subject, in the course of which he expressed the opinion that where two or more teams were used on the farm, it would pay the farmer to dispose of one team and use a tractor, provided that the land was suitable for a tractor.

With the tractor, it was not necessary to rise so early in the morning as was the case where horses had to be watered, fed, groomed, and harnessed.

The tractor would work almost continuously throughout the day, whilst the horses had to be fed and rested.

The tractor could be worked in long shifts, and at night if needed.

NEGLECT OF IMPLEMENTS AND TOOLS IS CRIMINAL WASTE.

Neglect to put machines under cover, to apply weather-proofing

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Every modern facility for prompt handling of fruit.

Docks and quays provide for quick discharge of cargoes.

Sales held daily during the season.

Express train service to all parts of England.

Australian Apples Sold at Hull in previous seasons brought the highest prices.

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paint, to keep sharp all cutting parts, to oil or otherwise lubricate all bearings is reducing the efficiency and shortening the period of usefulness of equipment in which many millions of dollars of farmers' money has been invested. The machine or tool is not the only loss, since the power, either horse, motor or man, is also reduced through having to work with a tool or implement not in the best condition. This double liability, while fully appreciated by the most efficient or business type of farmer, is a matter that should be understood by all who own or work with farm tools.

RAISIN BREAD.

A Development which will greatly Increase the Local Sales of Dried Fruit.

Raisin Bread has been put on the market by a number of bakers, who report excellent progress. The following reliable recipes are recommended by the Australian Dried Fruits Association:—

A Six Hours' Dough.

10 lbs. flour, 2 oz. salt, ¼ lb. milk powder, 2 oz. yeast, 5 oz. sugar, 3 lb. Seeded Raisins, 5 oz. best margarine or other good fat.

Sift the flour and milk powder together. Rub the fat in the flour mixing, make a bay, put the Raisins outside, and the salt and sugar in the centre. Mix the yeast with a little warm water, then make all into a somewhat soft dough with water at 98 deg. Cover up in warm place, knock down when well proofed (about six hours), give another half-hour, then scale off at 1 lb. 2 oz., prove, and bake in moderate oven. Do not dry out—just bake and that is all. Wash over with weak syrup if desired glossy. A Melbourne baker who tried the line had no "stales"—only sales.

Eight-hour Dough for Country Bakers.

In the country, where compressed yeast is not obtainable, the above recipe, with one pint of spon yeast instead of the two ounces of "dry" yeast, will give good results. The addition of two ounces Bakerine will work an improvement, especially if, while the weighing up is proceeding, it is mixed with a pint of warm (not hot) water and added to the pint of yeast, in dipper, kept in a warm place till time to mix.

Fruit Rolls.

Take from a batch of white dough, when knocked down, the number of loaves desired in dough. To every pound of dough allow 1 oz. fat and 1 oz. sugar. Rub well in, give a light dust and lay aside to recover. Weigh off at 4 lb., then pin out, keeping an oblong shape, sprinkle Seeded Raisins liberally over, roll up like a pastrycook's Swiss roll (jam roll), divide into one-pound pieces, put in small roll tins, prove and bake in moderate oven.

Another way is to roll out a long piece, pin it out to flatten, dust with Seeded Raisins, as before, roll up, cut off into pound pieces, and place in roll tins, prove and bake. The odd pieces from weighing may be moulded round and tinned. The fruit should show nicely in the cut rolls.

Growers and all interested should send these recipes to their local bakers, requesting that Raisin bread be regularly baked.

When travelling always ask for Raisin bread.

Keep up the campaign all the time for boosting Australian fruits.



WHAT SULPHATE OF AMMONIA DOES IN
THE VINEYARD.

The necessity for a reduction in the expense of crop production is greater when crop prices are low, but every care must be taken to ensure that no item of expenditure that will cause an increase, rather than a decrease, in the crop cost, is left out.

FERTILISERS can be depended upon to increase acre yields profitably, and they should therefore be used liberally when crop prices are considered un-

favorable, so that the effect of the low price is counteracted by the high acre yields which follow.

Quality, too, is improved by the intelligent use of fertilisers, and when quality and quantity are partners, the grower has little to fear from low prices.

Sulphate of Ammonia has proved an excellent aid to the production of *heavier yields of better quality* fruit, and its use is strongly recommended in the orchard or vineyard, either alone as a top dressing, or as the *nitrogen* constituent in mixtures containing phosphoric acid and potash.

Write for Sulphate of Ammonia literature to:—

THE AUSTRALIAN SULPHATE OF AMMONIA PROPAGANDA COMMITTEE,

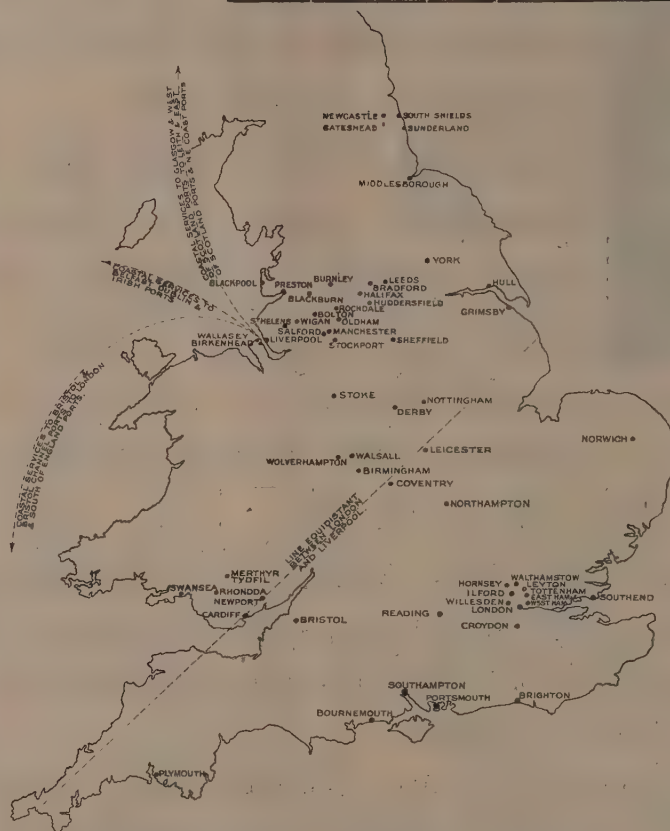
360 Collins Street, Melbourne, Vic.

N.S.W. and Queensland: The Australian Gas-Light Co., Haymarket, Sydney; The Broken Hill Prop. Co. Ltd., 28 O'Connell St., Sydney; The North Shore Gas Co. Ltd., 193 Alfred St., North Sydney.

Victoria and Tasmania: The Metropolitan Gas Co., 196 Flinders St., Melbourne; The Broken Hill Prop. Co. Ltd., 320 Collins St., Melbourne.

South Australia and Western Australia: South Australian Gas Co., Waymouth St., Adelaide.

FRUIT SHOULD BE SHIPPED TO LIVERPOOL



Population North of dotted line, 20 millions;
South, 17 millions.

Full particulars from...

Mr. L. A. P. WARNER

Gen. Sec. and Manager, Mersey Docks and Harbor Board

Liverpool, England

Liverpool is the great port of entry for the massed population of the North and Midlands of England.

In 1920 Liverpool imported and exported

Over £1,100,000,000 of goods

Quick unloading and despatch of fruit.

Cold Storage facilities available.

Regular Auction Sales in well-appointed sales rooms.

Liverpool is capable of absorbing much larger quantities of Australian fruit than at present sent.

Export of Fresh Fruit.

Overseas Markets Must be Established and Maintained.

The Estimated Export of Apples in 1924 is 1,360,000

"The Export of fruit from Australia and New Zealand is Vital to the Health and Prosperity of the Industry."

THE EXPORT OF FRESH FRUIT from Australia and New Zealand to Great Britain and elsewhere is a topic of perennial interest and paramount importance.

No progressive or well-informed grower needs to be convinced of the necessity for maintaining and developing the export trade. It is the export trade which has made a success of Apple-growing.

Not only has the export trade been a source of profit, but the fact of having that specific avenue of distribution has enabled our local markets to be supplied with regularity and the avoidance of gluts—that terror of the growers of soft fruits.

In connection with the establishment of the local trade, the value of cold storage plants is recognised and appreciated.

From a humble commencement, the export trade has grown to excellent proportions, the record being established last season in the export of two and a quarter million bushels of Apples.

United Kingdom the Principal Market.

When speaking of export, it must be recognised that Great Britain is our principal market. Prior to the war, we were finding it increasingly profitable to ship direct to Hamburg, not alone because of the consumption of fruit in that vicinity, but because buyers from all parts of the Continent attended the Hamburg sales, and thus Australasian fruit found its way to Russia and other distant places.

In the last three seasons, the export to Great Britain has not been so uniformly favorable as could be desired. True, there are many growers with excellent export varieties whose returns have been satisfactory right through, but the experience of the majority has been that the export returns have little more than covered expenses, leaving growers with nothing better than the satisfaction of having maintained a good local market through exporting the surplus.

Peculiar Marketing Experience.

Last season was a peculiar one. For the early shipments Tasmania—the main Apple exporting State—was debited with having sent immature fruit. Whether the charge was proved or not, does not alter the fact that fruit carried in the early boats met with heavy competition from U.S.A., and suffered in consequence. Apples from the mainland States also met low prices.

Australia's chief wealth comes from the export of primary products.

Fruit exports—fresh, canned, dried—have been showing a steady annual increase.

In the coming season, however, the export of fresh Apples will, owing to the light crop, be considerably less than last season.

In 1923, the export of Apples totalled two and a quarter million bushels. In the 1924 season, it is estimated the quantity will be about one and a quarter million bushels.

The general freight reduction to 4/- per bushel is appreciated, though efforts are not being relaxed towards securing a further reduction.

Whilst sending the bulk of the fruit to London, Australasian growers are keen to develop the trade with Liverpool, Hull and Manchester.

Then, owing to dry weather, the mainland export fruit petered out, and Tasmania, with a more favored season, kept on sending supplies forward, with the result that the later boats brought phenomenal prices, there being sufficient in quantity to bring the average of the whole of the Tasmanian export season up to a good payable level.

There is nothing new in this marketing experience, and growers who have been longest in the business have learned the truth that it pays to keep sending constantly to the markets, taking the good with the bad, and being satisfied if the average pans out at a payable figure.

A jumpy market with quick fluctuations, is not satisfactory to growers, wholesalers, retailers, or to the general public.

Huge Attendances in England.

As far as the present indications can be judged, the export market should be satisfactory. There will be huge attendances of people in London from all parts of the world attending the great British Empire Exhibition. The freight has been reduced to 4/- per case all round. The advertising campaign, which has previously done so much good, should be increasingly effective this season, because of its cumulative effect.

Owing, however, to the big prices received in Australia for cold stored fruit, there is a strong tendency on

the part of the growers to hold on to their fruit, and not to export it.

A Far-seeing Policy Needed.

This matter has to be considered in all its bearings, for if too many growers retain an undue proportion in Australia, the present big prices will not again be realised. Further, having developed an export trade, established soundly, with sufficient quantities to command the attention of buyers from the United Kingdom and the Continent, is it wise to pinch the export proportion to an undue extent?

We are sure that these factors will be thoughtfully weighed by our readers, having in mind that the industry is bigger than any particular orchard, bigger than any particular district or State, and that the matter of exporting our products is a duty to oneself and to the nation.

The larger the export trade, the most attention is paid to the industry by our statesmen, Governments, men of affairs, and the general public.

The export of fruit from Australia and New Zealand is vital to the health and prosperity of the industry.

Interesting Statistics.

The value of the annual average importation of fruit into the United Kingdom runs into the huge total of £36,000,000, and of this big sum, Australia contributes fruit to the value of approximately £2,000,000, including all fruits, fresh, dried and preserved.

Had the proposals for a preferential tariff proposed by the Baldwin Government been accepted, it would probably have meant a substantial increase in Australian fruit exports to the United Kingdom. This matter is referred to in another column.

With regard to Apple export, the following figures are interesting; they are compiled from the returns of the Board of Trade, and are re-published from the "Fruit World Annual":—

	Number of Bushels Imported.
1914.	
From all Countries	8,203,020
" U.S.A.	3,604,513
" Canada	2,916,390
" Australia	1,199,680
1920.	
From all Countries	12,936,924
" U.S.A.	4,780,697
" Canada	3,793,300
" Australia	1,140,550

Twenty Years' Selling Experience

**THE WORLD'S FINEST PRODUCE
IS
CONSIGNED TO**

**T. J. POUPART
Ltd.
LONDON**

T. J. POUPART Ltd.
110 LONG ACRE,
COVENT GARDEN, W.C.

————— **TWENTY YEARS OF** —————
STRAIGHT DEALING BEST RETURNS THE GROWERS' CONFIDENCE

Private Treaty Sales Only.

Branches and Selling Agencies: London, Liverpool, Southampton, Glasgow and Hull

1921.	
From all Countries	11,203,175
" U.S.A.	4,795,902
" Canada	4,183,345
" Australia	1,084,213
1922.	(approx.)
From all Countries	12,500,000
" Australia	2,008,029

terprise is the firm of Messrs. White and Son, of Hull, who have pioneered a trade to mutual satisfaction of all concerned, and have shown courage and foresight, coupled with integrity and real business capacity.

The export trade in Oranges, it is of producers. Prominent in this en-

South Africa, is certain, but as long as we send a good article, well-graded, and faithfully packed, so surely will there be a reasonable demand for our produce at remunerative—but not fancy—prices. This will keep our local markets clear for local operations.

With regard to Grapes: The variety Ohanez (Almeria) has proved its suitability for overseas carriage, and covering, as it does, a market comparatively bare of Grapes, has proved payable to the shippers. This trade is increasing, as larger areas come into bearing, particularly in the River Murray Valley.

Increasing attention is being paid to the export of Pears, and already there is considerable experience in the trade in dealing with the export of this choice fruit.

Plums, too, have been successfully carried. Further experiments are being made in this connection.

One of the Cambridge Scientists, who carried out experiments last year in connection with the shipments of Australian fruit to England, made the definite statement that they believed the time had come when Australian fresh Peaches could be sent to England successfully.

This matter, being the considered opinion of a trained expert, is worth following up. Even if the investigations cost many thousands of pounds sterling, it would be worth it many times over, to establish this trade.



Cased apples are transferred from river boats to the Hobart wharves. "Illustrated Tasmanian Mail" photo.

For 1923 the United Kingdom imported the average of 12,500,000 bushels of Apples, the quantity from Australia and New Zealand being two and a quarter million bushels.

Coming Season's Export.

The estimated export of Apples from Australia is anticipated to be approximately as follows:—

State.	Bushels.
Tasmania	900,000
Western Australia	250,000
Victoria	150,000
South Australia	60,000

Total 1,260,000

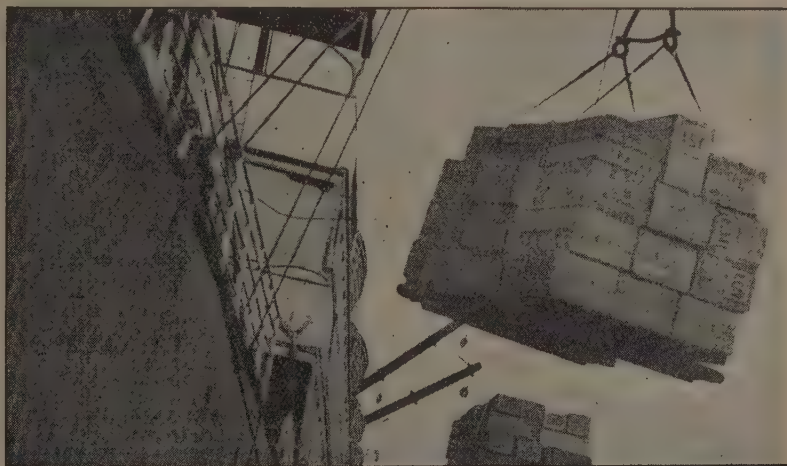
No figures are to hand from New Zealand. A cabled report stated that a sale of 50,000 cases of N.Z. red Apples had been made in South America.

The Outer Ports of Britain.

An interesting development of recent years is the energy displayed by the authorities in charge of the ports outside London to secure increasing quantities of the produce of the Dominions. In this work they are supported by the business men in those progressive communities. Their claim for consideration is just, reasonable and businesslike.

Whilst London remains the principal port, there is no reason why increasing quantities should not be sent to Hull, Liverpool, Manchester, Glasgow, Southampton and Cardiff. The three first-named are making the most effective efforts to secure the trade, and are getting it—and, it should be added—to the satisfaction

hoped, will soon increase in proportions. There are the inevitable earliest difficulties to be overcome, but the fact that a considerable quan-



Cased apples in trays being transferred to ship. These trays are a big improvement on the rope slings.

"Illustrated Tasmanian Mail" photo.

tity of fruit is carried successfully in ships' refrigerating chambers encourages the hope that all difficulties will soon be surmounted, thus providing for Oranges to be exported with at least the confidence with which Apples are now sent abroad.

That there will be competition from other parts of the world, particularly

"Every Grower Should Have a Copy."

In the opinion of G.W., Queensland the "Annual" is a first-rate production, containing a mass of interesting and valuable information for growers. It should be in the hands of every fruitgrower.

The Time is Opportune

to Ship Your Fruit to

MANCHESTER

The Port in the Centre of
The Most Densely Populated Area in the United Kingdom.

THE IMPERIAL FRUIT SHOW HELD IN MANCHESTER

from the 26th October to the 3rd November, 1923 was attended by visitors from all parts of the World; over 5,000 exhibits of British and Imported Fruit were shown, and an increased demand for choice fruit will follow throughout the area which Manchester serves.

Over 2,300,000 packages of Overseas Fruit were purchased in the Manchester Fruit Auction Rooms during the year ended 30th June, 1923, by Fruit Merchants trading all over the Midland and Northern Counties of England; these purchases were distributed direct to buyers' orders from the Manchester Docks.

In explanation of largely increased trade with Manchester, the General Manager of the United Fruit Companies of Nova Scotia Ltd., stated in his recent Annual Report:—

"This Market was the most consistent throughout the entire Season. Apples were handled much more rapidly and less adjustments were necessary—brought about by the fact that the facilities at Manchester are so much better than at any other English Port.

"They certainly have a very wonderful organisation, and we believe this is one reason why Manchester is becoming recognised as one of the best distributing Ports in England.

"Liverpool, from the standpoint of marketing our fruit, ranks second, while Glasgow is spasmodic, and in London practically until the close of the Season, much lower prices ruled than on any of the other Markets."

The following Fruit carrying steamers are listed to load in Hobart and other Australian Ports for MANCHESTER during the 1924 Season:—

"NORTHUMBERLAND,"	early February	"ARMAGH"	mid March
"ORARI"	mid "	"ARGYLLSHIRE"	end "
"AYRSHIRE"	end "	"SURREY"	early April
"BERWICKSHIRE"	mid April		

Big demands for space are anticipated, and early application to the Steamship Agents is advisable. If any difficulty is experienced in obtaining your requirements, write or wire to the undersigned who will render every possible assistance, and willingly furnish particulars of Port and Forwarding Charges, names of Manchester Selling Brokers, etc.

W. J. WADE

Australasian Representative of the Port of Manchester

8 Bridge Street, Sydney, N.S.W.

Export of Australian Fruit.

Sir Henry Jones Addresses Meetings of Tasmanian Growers.

Varieties: Grading: Branding: Advertising.

"Australian Port and Harbour Dues the Stumbling Block against Further Freight Reduction."

IN ORDER TO GIVE fruitgrowers the benefit of his recent experiences abroad Sir Henry Jones has toured several Tasmanian fruitgrowing districts addressing meetings of growers. At Franklin (states the "Huron Times"), the Chairman, Warden G. C. Frankcomb extended a hearty welcome home to Sir Henry, who had put a vast amount of energy into his work of investigating conditions relating to the sale of fruit in the United Kingdom. No doubt better conditions would be brought about as a result. (Applause.)

'Phone Central 8479

F. W. Vear

Fruit Importer
and Exporter

COMMISSION AGENT

49 WILLIAM ST.,
MELBOURNE, VIC.

Solicits consignments of APPLES, ORANGES, BANANAS, PINES and all other fruits.

Account sales with cheque daily.

Sir Henry Jones, who was cordially received, said one of the reasons why he took the trip was to secure better terms in regard to advances than the agents were offering, as the banks were requiring 70 per cent. value in securities for advances.

In company with Mr. F. W. Moore he went to Liverpool to see the "Argyllshire" unloaded. In face of all the complaints that had been made regarding the manner in which the Tasmanian fruit was opening up he was agreeably surprised to find this cargo in splendid condition.

It had been alleged by some of the brokers that Tasmanian Apples were affected with bitter pit again, but they examined this shipment and they admitted that the fruit was in excellent condition. In one lot branded Bushy Park Ltd. the Sturmers were a bit yellow and the New Yorks on the soft side, but otherwise so far as he could see the shipment was good. Of the 61,000 cases landed not one was broken, whereas barrow-loads of West

Australian cases had to be carted away owing to the cases collapsing.

It may only have been a coincidence, but it was somewhat remarkable that the day after his inspection of the fruit being landed from the "Argyllshire" the price advanced 1/- per case.

Sir Henry said he then went on to London and again met brokers who were ready to decry Tasmanian fruit, one of them saying he would go out of handling it on account of it being immature. It was satisfactory to be able to say that this broker changed his mind before the season was over.

In response to an invitation from the National Federation of Wholesale Fruit Traders, he met a large number of the brokers handling Tasmanian fruit and discussed with them the regulations which had been drawn up by Messrs. Meares and McDougall, who represented the Commonwealth. On reading these regulations his own opinion was that they should have been consigned to the fire. He proposed to deal with the recommendations one by one.

Varieties.

It was recommended that certain varieties should not be shipped, but this would be very hard on some growers who had been for many years past getting good prices for these sorts. Alexanders and Alfristons were amongst the varieties proposed to be prohibited, but they brought as high as 11/6 in the "Argyllshire" shipment—2/- more than some of the varieties recommended. What was the use of telling growers not to ship fruit which was bringing such satisfactory prices? He gave an instance of one grower having got 18/- for fruit which he (Sir Henry) had advised not to send forward. (Laughter.)

Grading.

The proposal to define the sizes to eighths of an inch was considered by brokers to be unnecessary. They recommended that the sizes be graded by quarter inches only and he believed this suggestion would be adopted by the Commonwealth authorities.

Boxes.

It was suggested that the fruit cases should be wire banded, but this was quite unnecessary so far as Tasmanian hardwood cases were concerned, though it might be advisable to so treat the pine boxes shipped from West Australia and Victoria. If insisted on it would mean an additional cost of about £40,000 a year to Tasmanian fruitgrowers for which they would get no benefit whatever. He therefore strongly opposed this proposal. (Applause.)

First Shipments.

One of the points made by the brokers was that we were not to ship our fruit too early. Last season the English fruit crop was the biggest on record and in consequence of this the American Apples were cool stored so as to be marketed late. This brought

them into competition with the early Tasmanian.

Owing to the fact that the United Kingdom was the only market open for early Tasmanian Apples these had to be shipped before they were over ripe and consequently the first shipments could not be made later than about the 10th February. Some districts, of course, were earlier than others, notably the Derwent Valley and Bagdad, whilst others, like the Huon, were a little later. Last season the record number of 300,000 cases were shipped from Tasmania during the month of February.

Irregular Arrival of Steamers.

Another complaint that had been made was the irregular arrival of the steamers in England, but while steamers of varying speeds and travelling by different routes were employed in the trade—and this was likely to be always—it is not possible for their arrival to be timed at regular intervals.

Inspection at Hobart.

Another point raised was that more inspection should be provided before

Edward Jacobs & Sons

Covent Garden Market
LONDON, England

Solicits Consignments
of Australian Fruit.

Tasmanian Representative:

W. D. Peacock & Co. Ltd
PRINCES WHARF, HOBART

Shipping Number 418.

the fruit left Hobart. Seeing that last year no fewer than 50 inspectors were employed he thought the suggestion must have been made by someone not knowing the facts of the case. However, he believed another 36 were to be put on this next season, so there would be quite a small army of them. (Laughter.)

The Government had passed most stringent laws with regard to rough handling of fruit on the wharves, making it a penal offence for anyone guilty of the practice. He had not heard however of anyone being put in gaol for knocking fruit about—perhaps it was because the gaols would not be big enough if they started to rope them in. (Loud Laughter.)

Reduction of Costs.

In reply to the request for a reduction of freight the shipping companies had pointed out that the port and harbour dues in Australia were exorbitant and that this was one of

Extending the Export Markets for Australasian Fruit.

Hull Offers Exceptional Advantages.

Messrs. White and Son Ltd. have
Pioneered an Important Trade.

THE TRADE IN HULL with Australasian fruit is steadily increasing.

This trade possesses all the elements of the ideals expressed so frequently at producers' conferences—the opening up of new markets.

Growers who have "got the habit" of shipping to Hull are satisfied that their enterprise has been worth while.

Messrs. White & Son Ltd. claim, with justification, that they are the

and in the clustered towns and cities that jostle each other within a radius of 100 miles from Hull, you will find a population of twelve millions of people. All this means a huge demand for food.

Or pass outwards down the estuary and across the North Sea, and it is seen that Hull is the natural port for supplying the Continent which lies at its door. It is to Hull that the northern European buyer looks—to Hull that he and his agents come.

One of the main articles of the creed of White & Son Ltd. is that everything possible should be done to assist the buyer in making his selections: only in this manner can the highest quality of fruit and packing secure its true worth.

Australasian Apples are carefully examined and the counts of waste are shown in printed catalogues specially issued for the information of buyers.

In 1922 the s.s. "Telamon" loaded 21,000 cases of Apples, which quantity was all consigned to White & Son Ltd., and notwithstanding the very unsatisfactory economic conditions then prevailing, 16/9½ per case gross was realised—a record price in the United Kingdom during that year.

"A Signal Success."

During 1922 White & Son Ltd. were able to persuade the South Australian Government to forward a trial direct shipment of their Oranges to Hull, and if results are anything to go by, this trade should considerably increase in the near future. This consignment was shipped to Hull per the s.s. "Ascanius," and was sold at auction on August 23rd.

"A signal success" was the unanimous opinion expressed at the conclusion of the sale which was attended by the Agent-General for South Australia, the Hon. Sir Edward Lucas, K.B.E., and the Trade Commissioner, Mr. R. M. K. Lewis. The average price realised for the whole shipment was 27/3 per case, which would have been considerably higher, had it not been for the percentage of cases with only a small number of Oranges in them. It is interesting to note that this shipment realised 6/- per case more than was obtained for identically the same class of fruit in London.

A Grower's Appreciation.

So far as last year's trading is concerned, the firm has just received a letter from one of the largest exporters in Western Australia, from which the following is an extract:—

"Dear Sirs,—

Two bright spots in a lot of gloom were my returns from the consignments of Apples sold in Hull. I instructed my agents to consign every package they could to Hull and Manchester. If only they had been able to send the whole of my shipments I should have been far better off and better pleased. Everyone in this district is expecting great things from the London Exhibition this year. Personally, I should be content if I could send the whole of my exports to the North of England."

The writer of the above letter was a complete stranger to White & Son Ltd. personally, and it speaks volumes for the efficient manner in which they handled their business last season.

The agents of White & Son Ltd. are—Parnham Pty. Ltd., 60 Queen-street, Melbourne; George W. Selth & McRae Ltd., Worando Bldgs., Grenfell Street, Adelaide; Paterson & Co., Viking House, Perth, W.A.; H. Jones & Co. Ltd., Old Wharf, Hobart, Tas.; J. A. Redpath & Son Ltd., 37 Johnston-street, Wellington, New Zealand, all of whom will be delighted to give all the information possible with regard to the organisation of the firm, and the opportunities which exist for a profitable expansion of the trade in Hull.



Efficient Fruit Handling. S.S. "Palma" discharging 59,000 boxes of Australian apples at Hull, direct to railway waggons

pioneer brokers of Australasian fruit in the Hull market.

Their active participation in the great industry of distributing fruit—for distribution is of itself an industry, just as much as production—dates back to 1837. Since that year, when the business was first established as Thos. White & Son, they have grown steadily. Indeed, to-day they handle not less than 50 per cent. of the total imports of fruit which enter Hull on consignment, and are sold by the recognised brokers. Each year sees a greater volume of business passing through their hands.

So far as the Hull market is concerned, one has but to glance at the map of Europe to see the wonderful natural advantages that have helped to make Hull one of the great ports of the world.

Pass inwards from the North Sea,

A further catalogue is issued after the sale, showing the prices realised—a method not only highly satisfactory to the shipper, as showing him the actual prices obtained—but also conducive to a healthy rivalry amongst the brokers and tending to the maintenance of a high level of prices.

FRUIT TRADING between Australasia and Hull was inaugurated by White & Son Ltd. in 1912. One of the Directors, Mr. J. F. Kruger, went out to Australia during that year, with the result that the following year direct shipments from the Commonwealth were received. The s.s. "Clan McArthur," with 20,000 cases, was the first steamer to arrive. The prices realised for this boat's cargo were more favourable to the shipper than any previously obtained that year in the United Kingdom.

the stumbling blocks towards reducing the freight charges. The charges in Tasmania were less than on the mainland and it was suggested that preferential freights might be made on this account for this State.

Branding.

The brokers were unanimously opposed to the excessive amount of branding that was plastered on Australian fruit cases. Practically all they wanted was the kind of Apple and the name of the grower. The classification into "fancy" "standard," and "plain" grades was a waste of time because buyers took no notice

having a voice in the framing of export regulations. Out of 2,200,000 bushels sent overseas Tasmania sent 1,600,000. He suggested that the voting power at the Australian Fruit Council should be proportionate to the fruit exported by the respective States. (Applause.)

Bad Carriage of Fruit.

It has been decided to have a further investigation during the coming season into the causes which lead to the deterioration of fruit during carriage overseas and the Cambridge University expert will again conduct experiments on some of the vessels carrying fruit to England next season. His firm (H. Jones and Co. Ltd.) had guaranteed £1,000 towards the expense of this work if the Commonwealth Government refused to accept the liability. (Applause.)

Advertising.

Last year a halfpenny per case was deducted from all overseas fruit to pay for advertising Australian and Tasmanian fruit in England, and he believed they got good value for the outlay. He would strongly recommend that the growers should agree to the charge again next year, especially as the brokers had offered to contribute a similar amount for the same purpose.

The Allotment of Space.

Sir Henry said some of the Co-operative companies had complained to him that morning that Jones and Company's travellers had made certain statements about the control of space in the fruit steamers in order to get the co-operative members to book their English fruit space with his firm. He was satisfied that these reports were absolutely incorrect as his travellers had strict instructions not to cry down any of the co-operative companies or the other Hobart shipping firms, and he was sure that his employees were careful to carry out this policy. He wanted to remove any impression that Jones and Co. were trying to take advantage of the other shippers in this matter.

Resolutions.

After some questions had been answered by Sir Henry the following motions were unanimously agreed to.

By Mr. Thomas: That this meeting objects to any further money being deducted from the returns for any fruit shipped to England for the purpose of building up a fighting fund while such a large sum is already available for this purpose.

By Mr. T. A. Frankcomb: That growers are willing to contribute a halfpenny per case to supplement the sum forthcoming from the brokers in England for the purpose of advertising Australian fruit in the United Kingdom.

By Mr. W. J. Thomas: That the question of a reduction in the freight on fruit to England be left in the

hands of Sir Henry Jones to do what he can for the growers with a view to getting a reduction to 3/- or 3/6 per case.

By Mr. J. A. Mason: That this meeting considers it unnecessary to have additional brands put on cases for shipment to England, and that it be a recommendation to the Tasmanian representative on the Australian Fruit Council that the motion approving of the unnecessary brands be rescinded.

The meeting concluded with votes of thanks to Sir Henry Jones and the Chairman.

F. W. MOORE & CO.

LIMITED

Clarence House

Arthur Street, London Bridge
LONDON E.C., 4, Eng.

We are the largest receivers of Green Fruit from Australia, our consignments having steadily increased annually since our business was established in London in 1902. Our Managing Director has had the handling of consignments to the markets of Great Britain and Europe since 1900, and personally supervises the sale of all fruit consigned to the Company. Fruit is placed for sale in whatever markets or way (auction or private) appear most suitable, thus getting it before all classes of buyers; our increasing consignments demonstrate the success of this practice.

F. W. J. MOORE,
Managing Director.

Telegrams: Tirralirra London

Bankers: Bank of New South Wales.

PROPOSED EMPIRE PREFERENCE.

Speaking at Cygnet, Sir Henry Jones said that American competition had spoiled the sale of Australian Apples in the first ten boats last season. The proposed duty of 5/- per cwt. (or 1/9 per case) on Apples not produced in the British Empire was highly important. If adopted by the British Government, it would tremendously assist the Australian Apple export trade.

Meetings were also held at Huonville, Geeveston, and other centres.

FRUIT TREES

One or One Million
Supplied

W. G. GRAY

Allwood Nurseries
Hurstbridge, Vic.

Write for Catalogue
Post Free.

COVENT GARDEN,
LONDON

Ridley, Houlding & CO.,

Large Receivers of Australian
Fruits.

Solicit Consignments of
Apples, Pears, &c.,

Best market prices and prompt
account sales returned.

Correspondence invited.
Representative in Victoria

THE

International Fruit & Mercantile Co.,
410 Flinders Lane, Melbourne
MURDOCH BROS., Hobart

whatever of these labels. They bought on the appearance of the fruit when it was offered for sale. It was a recognised fact that one man would brand fruit "plain" which another would consider "fancy," and then again the fruit might be the very best when it is packed but open up very poorly when marketed.

Tasmania and the Regulations.

As one who was deeply interested in the success of Tasmanian fruit on the English market he resented the mainland States—especially Queensland and New South Wales, who did not export any Apples or Pears—

THE WORLD'S LARGEST FRUIT MARKET.

Geo. Monro Ltd.

Covent Garden Market, London,
Manchester, Liverpool, Hull, &c.

THE fruit exporting season is now rapidly approaching, and unfortunately the crop prospects throughout the Commonwealth appear to be considerably below the average, the quantity available for shipment to Great Britain is consequently considerably less than the past two seasons; this fact, when considered in conjunction with the tremendous influx of visitors expected in London next season for the great Empire Exhibition rather indicates that prices will be very much more satisfactory than they have been during the past two seasons, growers will therefore be well advised to ship a reasonable proportion of their crop to London.

During the past three seasons the firm has sold on behalf of Australian growers alone, over half a million bushel cases of fruit; these are big figures, and account sales of a highly satisfactory nature can be shown by growers in every district in Australia where Apples, Pears or Oranges are grown.

Last season the early shipments from the Commonwealth consisted of fruit in rather immature and wasty condition, and quite a large proportion was very spotted, this particularly applying to such varieties as Cox's Ribston's, N.Y.P.'s, and Cleopatras. That this condition detracts very considerably from the sale is proved by the fact that for really good Cox's ex the s.s. "Orsova" 30/- per case was realised, whereas spotted Cox's off the same boat sold as low as 8/-.

The last American Apple season was more than usually prolonged, owing to the low prices at the beginning of the year causing that country to hold back her fruit, and when the first Australian boats arrived with the fruit in an immature condition, buyers showed a decided preference for the American fruit, which was well colored and ripe, prices for Australian fruit consequently fell to a very low point, and it was well on towards the end of the season before the confidence of buyers was restored.

Another factor adversely affecting prices was that the quantity of Apples imported into England showed a considerable increase over last year, as will be seen from the following figures:—

1922.	Cwts.	1923.	Cwts.
April	302,372	April	530,790
May	409,264	May	415,568
June	290,002	June	351,784
July	79,822	July	88,386
	1,081,460		1,386,618

In all, an increase of 305,158 cwts. during the four months. It was impossible to make any headway until the quantity from America began

to fall off considerably, and the Australian fruit arrived in more mature condition.

The firm of Geo. Monro Ltd. now employs a staff of over one thousand, and they own a fleet of 45 Leyland motor lorries, which are constantly in use for the transport of their enormous fruit trade. The firm's annual turnover is over £4,000,000. The business of this firm has now become so enormous that it is no exaggeration to state that it is the largest of its kind in the world. It embraces no less than seven distinct buildings in and in close proximity to Covent Garden Market, the floor space of these buildings is many acres in extent, and provides the very finest show rooms in the fruit trade of London; the firm is thus enabled to display all fruit consigned to it in that attractive manner which fruit should be displayed. The salesmen are the most expert men in the trade. The sale rooms are open for 12 hours daily, and are visited regularly by the highest class buyers from London and the Provinces. These are some of the reasons why the account sales of Messrs. Geo. Monro Ltd. always compare more than favourably with those of other agents. Another matter of vital importance to growers is that the firm's account sales show exactly what each consignment is sold for. Prices are not averaged. A correct statement of the transaction is given, and only actual out of pocket expenses are charged.

The firm's most important branch establishments are at **Manchester, Liverpool and Hull.** The Manchester branch has recently been extended by the erection of a splendid building possessing every modern device for the better handling, packing and storage of fruit. Large quantities of Australian Apples are disposed of at this important centre.

As evidence of the firm's reputation as high class salesmen, it might be mentioned that during the past two seasons considerable quantities of Australian citrus fruits have been consigned to it, most of which has been disposed of at satisfactory prices. A point of special interest to growers, however, is the fact that Australian Oranges that have been consigned to other agents, during the past season, have been sold by auction to speculators who have then handed them over to Geo. Monro Ltd. for resale, the result being that much higher prices were secured by private treaty than by auction. In other words, the speculator reaped a profit which should have gone into the pockets of the growers.

The Chairman of Directors is Major E. G. Monro; Managing Directors, Mr. Geo. Monro and Mr. B. J. Monro, Director Captain J. S. Monro, Mr. A. J. Monro, and Mr. C. Cole.

The Australian agent is Major H. Dakin, Goldsborough House, Macquarie-place, Sydney.

Sub-agents are located in each State as follows:—

VICTORIA.—Mr. Esmond Russell, 60 Queen-street, Melbourne.

WEST AUSTRALIA.—Mr. R. Wallace, Mount Barker.

TASMANIA (SOUTH).—W. H. Ikin & Son, Hobart.

TASMANIA (NORTH).—N. D. Wivell, Sidmouth.

(Advt.)

TASMANIAN APPLES.

West Australian Criticism Refuted.

Commenting on the recent charges levelled against Tasmanian export fruit at the annual meeting of the West Australian Advisory Board, the State Fruit Expert (Mr. P. H. Thomas) refutes the implications that are made which are likely to have a damaging effect on the Tasmanian industry.

The position is stated thus by Mr. Thomas:—

"Owing to the late season of 1923, the ripening of the earlier Apples was

There is no doubt the West Australian fruit colours earlier than the Tasmania, but colour, although improving the outside appearance, is very little guide to flavour and quality."

Western Australia

FRUIT-GROWERS' CONFERENCE.

Export and Local Marketing.

CONFERENCES of Western Australian Fruitgrowers were held at Perth at the end of November.

The first meeting was a sectional one, mainly representative of Apple-growers, at which Rev. F. Davis (Bridgetown) presided.

The report of the President of the Western Australian Fruitgrowers' Association (Mr. J. Martin) stated that the Government's financing of the State Advisory Board had placed the latter in a far better position than the old association could ever hope to occupy, and he took it that this would be the final meeting of the W.A. Fruitgrowers' Association as now constituted. Members decided, however, not to disband.

The report then referred to the unsatisfactory returns from the export trade during the past two years. "Brown-heart," however, would not recur if the shipping companies gave the fruit the proper treatment.

Dealing with the proposed erection of central markets in the metropolitan area, Mr. Martin expressed pleasure at the rejection of the Bill which would have given the City Council a monopoly. It was only right that the growers whose produce was being handled should have some say in the matter.

In opening the Conference, the Minister for Agriculture (Mr. H. K. Maley) commended the work of the Advisory Board. Growers should keep their own organisation going so as to have the Advisory Board under their control and election. It was gratifying to note that the fruit export trade to the Near East was expanding.

Speaking of cold storage at Fremantle, the Minister said that the idea of insulating one of the sheds on Victoria Quay was impracticable. Whilst recognising the great importance of cold storage facilities, no im-



River boats loaded with Apples arriving at Hobart from Derwent Valley and Huon districts. "Illustrated Tasmanian Mail," photo.

delayed somewhat, and consequently the fruit on the first one or two boats was not so forward as in a normal season. The Tasmanian grower, and similarly the West Australian grower, has to guarantee, early in December, space required for the shipping programme. Should any untoward conditions arise, he has still to keep his agreement, or is liable for the amount booked. When the West Australian grower has been shipping his fruit a little longer, he may find out that circumstances over which he has no control, will perhaps arise that will operate in a like manner upon his own exports.

The Chairman (Mr. Owen Sparks) endeavours to fix the blame for the low prices obtained in the early part of the season on Tasmanian immature fruit, and forgets to mention the real factor, i.e., the large quantities of American fruit which were held in cold store, and thrown on the market in competition with the whole of the Australian fruit.

The reports of Sir Henry Jones's investigations make one wonder, "How much of the fruit on the early boats did arrive in the condition represented?"



A portion of the Sample Room of White & Son Ltd., Hull, England, showing manner in which fruit is displayed for inspection by buyers.

mediate scheme for erecting a store would be "rushed," because the whole matter of increased harbour accommodation was under consideration.

A motion, "That the W.A. Fruit-growers' Association do not disband, but that we do not affiliate with the Australian Conference of Fruitgrowers," was carried unanimously.

Messrs. Sparks, Booth, and Sharp were nominated as the Association's representatives on the State Advisory Board.

Fruit Insurance.—After discussion, the following resolution was carried:—"That at present the Fruitgrowers' Association is not sufficiently organised to warrant the drawing up of a fruit insurance scheme, but the matter should be recommended to the State Advisory Board for its attention as soon as possible."

Office-bearers.—The election of officers for the ensuing year resulted as follows:—President, Rev. F. Davis; Vice-President, Mr. R. Edwards; Executive, Messrs. A. Cullen, E. Hill, C. H. Ozanne (Bridgetown), J. Martin, E. Thomas (Mt. Barker), H. A. Fanning, and J. S. Ipsen (Manjimup).

Fruit Barrows.—The decision of the City Council to remove all fruit barrows from Wellington-street, between Barrack and William streets, was criticised. The benefits of the barrows to the public and the fruitgrowers was stressed, and it was decided to approach the Commissioner of Railways in the matter, the council's de-

cision having been made, it was reported, to facilitate the Commissioner's plan for beautifying the station approaches.

Fruit Crop—Season, 1923-24.

Good Medium Crop of Apples Anticipated: Pears Light.

Crop anticipations for Western Australia are set out as follows by Mr. Geo. W. Wickens, Government Officer in charge Fruit Industry:—

The Apple crop is not uniform throughout the State, being much heavier in some districts than others, but on the whole I anticipate the production will be equal to about 2-3rds of last year's. Last year we had an abnormally heavy crop of Apples. This year the crop will be from medium to good.

Jonathans, heavy; Dunn's, medium to good; Cleo., light to medium; Yates', good in south-west, light in the south; Rokewoods, good in south-west, very light in the south; Granny Smith, good; Statesman, good; Rome Beauty, medium to good; Dougherty, good.

Pears have set a very light crop indeed, in many orchards the export varieties being almost a failure.

Apricots, heavy; Peaches, light to medium; Jap. Plums, light to medium; English Plums, light to medium; Grapes, heavy; citrus fruits,

not yet sufficiently advanced to forecast.

WESTERN AUSTRALIAN FRUIT-GROWERS.

Closer Organisation Advocated.

Auction Marketing Condemned.

A Correspondent's Views.

"Spero, Meliora," Foothills, W.A., states that fruitgrowers in general, and citrus growers in particular, are passing through a trying period: low prices, high distributing charges, high wages. He continues:—

Our chief troubles are due to lack of organisation, for though many attempts have been made to bring growers together, there is something wanting to make that cohesion so necessary to success. It is so very difficult to find out what is wanting, and when a scheme appears to have the elements of success, it follows the fate of its predecessors as soon as the enthusiasm has had time to cool off.

Our system of marketing wants revising, and placing on a more satisfactory footing. At present we are in the hands of the auctioneers, of whom there are several who, whilst working in opposition, are in association in regard to charges and handling of our products, and as there is little to choose between them we are helpless.

The method of selling is unreserved auction; there is no classification,



A RELIABLE SPRAYER

Here is a Plant that Practical Orchardists Value:

PUMP—Double-Acting, High Pressure, Single or Duplex as required, working up to 300 lbs. per sq. inch.

ENGINE—1½ H.P. Fairbanks-Morse, type "Z," operating on kerosene.

VAT—Approximately 80-gall. capacity; strongly made, easily cleaned.

HOSE—Two 30-ft. lengths 6-ply H.P. hose fitted with "Edgell" patent cut-off and Bordeaux nozzles.

TRANSPORT—Low-set, well-balanced and firmly put together.

Let us quote you for prompt delivery.

Dangar, Gedye & Co. Ltd., Young St., SYDNEY

... EXPORTERS ...

When shipping your FRUIT use the

"AIRFREE" CASE

(Patent 9331/22)

Which

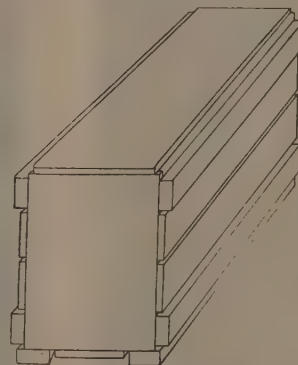
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Perfect

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Protects

Your

Fruit

from

being

Bruised

Full particulars from

ESMOND RUSSELL

60 Queen Street, Melbourne
or any Export Agent

each lot being placed on a travelling table and sold in lots to suit the purchaser, who may buy one or more cases. A consignment of twenty cases of a similar grade and quality may, and sometimes does, have 20 different prices, with a range of shillings between the highest and lowest; and even with a stable market there are wide differences for equal quality—all according to the time the consignment is offered.

So far as can be learned no effort has been made to standardise prices. Though we now have many growers who do standardise their fruit, and no doubt get better returns for so doing, but they also get a variety of prices for similar grade and quality.

Again, the auction system is detri-

mental to the industry, for the reason that it causes wide fluctuations, and thereby prevents forward dealing, and has given rise to a state of "pull devil, pull sailor." On a scanty market the auctioneer makes the price; on a full market, the buyers do so.

It would not matter if it were the fluctuations of the season or the law of supply and demand, then it would be quite understandable, but these variations take place at any time, and in midseason when all fruit is plentiful.

Several kerbstone markets have been established in Perth and suburbs, and whilst these have provided an outlet for medium grade, and poor fruit, it has had a depressing effect on general prices, as buyers appear

to be making their values for prime lots on the basis of kerb values, so that we are no further advanced.

Again, the Government has decided to carry per passenger train single case lots of fruit as a maximum rate not to exceed 1/6.

This is of very little value, without organisation, for our troubles are collective, and it is necessary that we fight collectively and not individually, under the arrangement each grower is in competition, consequently there is no improvement.

I hope these few lines will help to start an agitation that will go forward to improve our condition, and insure us getting a "fair days' pay for a fair days' work."

STONE FRUITS CITRUS TREES and QUALITY ROSES

A Good Start means Everything!

BEFORE PURCHASING send for Lasscock's Catalogue and prices. These South Australian grown trees are unsurpassed for hardiness, healthiness, and vigor. They will jump from the start and bring profit to the grower. Our stocks are excellent and prices right. Special attention is given to packing.

LASSCOCK'S NURSERIES Henley Beach Road,
LOCKLEYS, STH. AUSTRALIA

CODES---
A B C, 5TH EDITION
BENTLEY'S

BANKERS---
LONDON JOINT CITY AND
MIDLAND STRAND, LONDON

TELEGRAMS---
BRADNUMITE, LONDON

SHIP YOUR FRUIT

TO THE FIRM OF

BRADNUM

London - Hull - Cardiff
Liverpool and Southampton

Economical Distribution.

Sales by Auction and Private Treaty.

Correspondence Invited.

Write for our Souvenir Booklet.

JAMES BRADNUM, COVENT GARDEN, LONDON



Poultry Notes.

By Ian P. Hamilton.)

Summer Management of Chicks.

THE SUMMER SEASON requires special study in the successful management of chickens.

Milk, which during the spring months has proved such an important factor in chicken diet, will often sicken them in hot weather, and should then be left off the ration, though a little sweet skim milk may still be given in the food or for a drink in the early mornings, so long as it can be taken with appetite. Special care should be taken to see that the vessel is scrupulously clean.

Shade is the great essential in the summer management of chicks, hot sun being most prejudicial to vigour and growth. Of course living trees provide by far the best shade, and where there are no trees or shrubs, creepers on the fence will add to the utility as well as the beauty of the chicken run, and are in foliage just when they are wanted.

Sunflowers also grow rapidly, and give a good deal of shade, and root-scratching as well as providing some excellent food later on.

While little, chicks will do a lot of good, and no harm amongst bush fruit.

If living shade is not available in any form then artificial shelter must be provided, otherwise growing chicks will suffer in growth as well as plumage.

If the house does not have such an aspect as to provide the necessary shade, then linen or hessian may be stretched on sticks like a tent, or a hurdle erected at a sloping angle with branches through it.

In yards where numbers of chickens are reared, they often appear to play about the middle of the summer, and almost cease visible growth. One such stage nearly always occurs when the first plumage is about completed, but this is merely nature's pause after the effort of feathering. Life and vigour are not affected by it, and growth is soon resumed.

But there are times when a later flagging occurs, which is not universal, but confined to chickens that are not reared on free range. One cause of it is sheer monotony (says S. H. Lewer, of the "Feathered World"). They know every inch of ground, and they get listless, walk over it less and less, become torpid and perhaps too fleshy, all of which is good for table purposes, but not for health and vigour in stock birds.

The run may also be gradually becoming tainted, not perhaps offensively so, but sufficient to effect the air close to the ground, where the fowls live, more than higher up where we breathe it. Disinfectant cannot help much, except that in very hot and dry weather copious watering with sodium or potash permanganate occasionally, really will supply actual oxygen to both ground and air, which is what we want.

The real remedy is change to fresh air and fresh surroundings. Such a crisis usually comes at a time when it is also necessary to separate the cockerels from the pullets, and the experienced breeder should make provision to have available two fresh and sweet runs that have been vacant for some time.

If these can be grass runs with shady trees, the birds, after removal to them will be noticed to once more resume rapid growth.

Bee-Keeping.

Empty Combs.

WHEN COMBS ARE LEFT in Spring, after the death of the bees in a hive, there is no safer place to put them than in the care of a good strong colony.

Brush off the dead bees and put the combs in a clean hive on the stand of a strong colony, and then place the colony over this hive of empty combs, so that they will be obliged to pass through the hive of combs to go in or out.

In other words, give the bees no entrance except that of the lower hive, allowing free communication between the two.

The combs will then be kept free from worms and mould, with no care whatever on your part, except to keep the entrance so small, for two or three days at first, that robbers will not trouble.

When the weather has become warm, three or four stories of empty combs may be piled over a queen-excluder on top of a hive containing a colony; then a frame of brood in the upper story will make sure that the bees traverse all the combs.

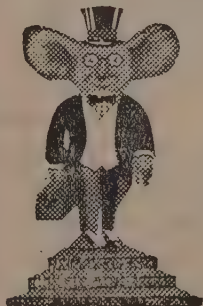
BEE-KEEPING AND FRUIT-GROWING.

MOST FRUIT, especially the finer varieties, requires the aid of bees in scattering pollen from flower to flower when the fruit is in embryo or just started.

The Difference Between Profit and Loss Lies in Clean Orchards

A New Era in Orchard Sprays

GUMLYPTA ORCHARD SPRAY



The combined insecticide and fumigant that can be used on your trees at any time of the year, and costing less than 3d. per gallon for effective strength.

Destroys Woolly and all Aphids, Red Spider and all Scale Insects, White Louse, White and Pink Wax. We recommend 1 part Gumlypta to forty parts water for general purposes.

GUMLYPTA ORCHARD SPRAY is Eucalyptus Oil and other insect destroying oils scientifically blended with Carbon Bi-sulphide, etc., so as to mix with water at any strength.

Prevents Fungus growth and Leaf Curl, etc. Thousands of gallons sold throughout Yanco, Gosford, Wyong, Orange, Richmond (N.S.W.), Mildura, Castlemaine (Vic.), Stanthorpe, Mapleton (Q.), and the Huon (Tasmania).

PRICES:—7/9 per gallon in 4 gallon tins, 8/6 in 1 gallon tins, F.O.B. Sydney.

PAMPHLET AND TESTIMONIALS ON REQUEST.

GILLARD GORDON (Aus.) LTD., Rozelle, N.S.W.

If, therefore, the two industries are so intimately connected, why should not the business of growing fruit combine nicely with the business of producing honey?

Fruitgrowers all over the country have come to recognise the valuable work performed by the bees.

As they consider their little friends indispensable, they have been buying one lot of bees after another, until now a number of fruitgrowers have quite large apiaries, and while they were induced to keep bees to help their fruit growing they have also found that bee-keeping can be made a very profitable side line. It is very seldom that the two industries conflict.

The result is that the bees can be worked part of the time, and the fruit trees the other part. This is being done to a very large extent by Orange growers in America.

Nearly every season fruit trees yield a little honey, just when it is most needed to stimulate brood rearing, and although the bees may not store much, they will gather enough to give the whole apiary a new impetus, so that, where fruit is grown extensively, beekeepers often receive considerable benefit.

QUICK "TURN ROUND" AT LIVERPOOL.

It is reported from Liverpool on October 25th that the White Star R.M.S. "Baltic," which arrived from New York on Monday morning last sailed again for New York on Thursday afternoon, and that during the short period she was in the port she disembarked American passengers at the Liverpool Landing Stage, entered dock, discharged and loaded nearly 11,000 tons of general cargo and bunkers in 54 working hours, afterwards undocking and embarking a full complement of passengers before sailing on her return journey.

A portion of the cargo of the "Baltic" consisted of fruit, and constituted one of the largest shipments by a single vessel from the States, but these consignments did not constitute a record in comparison with the 68,879 packages of Apples, Pears, etc., brought to Liverpool by the White Star liner "Celtic" last week.

This affords but another eloquent proof of the rapid and efficient manner in which this port deals with overseas vessels and their cargoes.

CARE OF MOTOR ENGINE.

"Drain Old Oil from Oil Reservoir Frequently."

ONE of the most important details in securing efficient operation of your car is to drain the old oil from the oil reservoir frequently, writes the Vacuum Oil Co. Unless this is done after periods of 1,000 miles of driving, you are driving with danger in your crank case.

Upon examination of the oil in your oil reservoir, you will probably find that it has become black, thinned out, and diluted.

What has happened to it?

It has become contaminated by constant use under intense heat. It has been diluted by petrol and water—the products of incomplete combustion. It also contains particles of carbon, dust, road dirt and sometimes fine particles of metal.

This mixture cannot lubricate your engine properly. Continued use results in:—

1. Premature wear of cylinders, pistons, piston rings, crank shaft, connecting rod and piston pin bearings, and possibly burned out bearings.

2. An incomplete piston ring seal with consequent loss of compression and power.

3. Fouled spark plugs and carbon deposits.

4. Excessive carbon sediment in the crank case.

5. Direct waste of petrol.

All these lead not only to inefficient operation and engine troubles, but also to expensive repair bills—the greater part of which can be avoided by draining out the oil in the crank case every 1,000 miles.

It's cheaper to buy oil than new parts.

It's quicker to drain the crank case than to tear down the engine.

Refill your crank case with the correct grade of oil.

A chart showing varying grades of oils and their uses is available from the Vacuum Oil Co. offices throughout Australasia.

"You're looking bad, Sandy."

"Aye, I've been in the hospital and the doctors have taken away my appendix."

"These doctors 'll tak' anything. It's a peety ye dinna have it in your wife's name."

FIRST!

.. THE ..

Latham Dehydrators

The Widest Fruit Drying Experience in the world is behind these plants. The best possible recommendation is the extent of one's patronage. My plants attract by far the largest drying business in the Southern Hemisphere.

Some Installations

Purchaser	Principal Fruits
Merbein Dehydration Trust, Mildura	Sultanas
Tasmanian Dehydration Pty. Ltd. Bridgewater	Apricots Prunes Apples
Charles Martin, Yackandandah	Prunes
Swallow & Ariell Ltd. Port Melbourne.	Carrots Turnips Cabbages, etc.

Lemon Processing Plants.

Dried Fruit Graders

Dried Fruit Boxing Presses

Apple Slicing Machines

Belting Pulleys, Shafting, Bearings, Engines and Boilers, Cranes and Hoists, Piping, Trucks, Conveyors, Thermometers, Fruit Trays etc., etc.

D. J. LATHAM

157 Queen Street,
MELBOURNE,
AUSTRALIA.

THE BEST FRUIT

Can Only be Obtained from Healthy, Thrifty Trees.

TREES FROM THE

BALHANNAH DECIDUOUS NURSERIES

Postal Address - - - BALHANNAH, SOUTH AUSTRALIA

Are bearing heavy crops of first quality fruit in leading fruitgrowing centres throughout the Commonwealth.

QUALITY IS MORE THAN A SLOGAN WITH US—IT IS THE KEYSTONE OF OUR BUSINESS.

Inquiries Solicited.

H. N. WICKS, Proprietor.

THE ELLIS FRUIT GRADER

will help you to be well up to the mark.

GOOD—BETTER—BEST,
Never let it rest,
'Til your good is better,
And your better best.

You will get the best out of an

"ELLISIZER"

Price, £16/10/- machine only, £21/10/-
with Table and Hopper complete.

Here's another copy of numerous appreciations that reach us:—

8/3/23
"The Grader is working very well and I have tried
it on pears and peaches.—Yours truly,
(Signed) PHILLIP G. PULLAR, Tatura.

Ellis Fruit Grader Co.
226 FLINDERS LANE, MELBOURNE.

Agents:

Colonial and Interstate Agents:—Queensland—Sthrn.
Q'land Fruitgrowers' Assn., Roma St., Brisbane. N.S.W.
H. H. Hinds Ltd., 484 Kent St., Sydney.
Sth. Aus.—Premier Machinery Co., Morphitt St., Ade-
laide. New Zealand—A. Simmonds Ltd., Heretaunga
St., Hastings. South Africa—Oswald Bros., Cape Town.

FRUITGROWERS

CONSIGN YOUR FRUIT TO

The North of England Fruit Brokers Ltd.

MANCHESTER

We sell and distribute among 10,000,000 con-
sumers within a radius of 50 miles of the Man-
chester Docks. It is the unrivalled demand of
this enormous population that enables the best
prices to be obtained. Steamers will serve Man-
chester direct during the season of export, and a
trial shipment will convince you that you are
marketing in the best centre in the United King-
dom.

For particulars regarding advances, steamship
services, etc., write to

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Royal Exchange, Sydney, N.S.W.

Representing

THE NORTH OF ENGLAND
FRUIT BROKERS LTD.,
MANCHESTER

Australian Commonwealth Line

FAST PASSENGER AND CARGO SERVICE TO LONDON

Via Adelaide, Fremantle, Colombo and Port Said, transshipping
at Colombo for Calcutta, Rangoon, Madras and Bombay :

VESSELS SAIL AS UNDER:—

	Tons	Brisbane	Sydney	Melbourne	Adelaide	Fremantle
T.S.S. LARGS BAY	13,850	22nd Dec.	29th Dec.	2nd Jan.	5th Jan.	10th Jan.
" HOBSONS BAY	13,850	14th Jan.	19th Jan.	23rd "	26th "	31st "
" ESPERANCE BAY	13,850	9th Feb.	16th Feb.	20th Feb.	23rd Feb.	28th Feb.
" MORETON BAY	13,850	4th Mar.	11th Mar.	19th Mar.	22nd Mar.	27th Mar.
" JERVIS BAY	13,850	1st Apl.	8th Apl.	12th Apl.	16th Apl.	19th Apl.

Taking Wool, General and Frozen Cargo at Lowest Rates.

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Offices: BRISBANE SYDNEY, MELBOURNE, ADELAIDE,
AGENTS AT ALL OTHER AUSTRALIAN PORTS

Orchard, Vineyard and Farm Implements

D. HARVEY

BOX HILL

MELBOURNE



NO. 10 S.F. GENERAL PURPOSE PLOW.
High Steel, Goose-neck Beam, Fixed Handles.



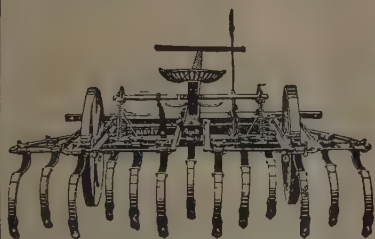
"HARVEY" GOOSE-NECK S.F. PLOW.
With shifting or fixed handles. Made in
7, 8, 9 and 10 sizes.



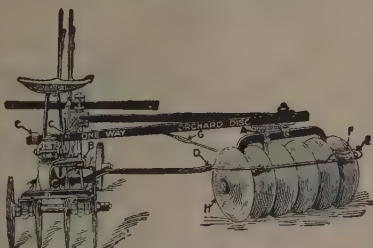
"HARVEY" ORCHARD PLOW.



"HARVEY" 2-FURROW SHIFTING
ORCHARD PLOW.



SPRING TOOTH RIDING CULTIVATOR.



"HARVEY" ONE-WAY ORCHARD DISC
CULTIVATOR.



4-FURROW POWER LIFT TRACTOR PLOW.



"HARVEY" GRAPE HOE.



"HARVEY" SPRING TOOTH CITRUS &
ORCHARD CULTIVATOR.



LIGHT 2-FURROW ORCHARD DISC PLOW.

Office and Works :

D. HARVEY, Box Hill, Melbourne, Vic.

Show Rooms : F. R. Mellor, 440 Elizabeth St., Melbourne

Write for New Illustrated Catalogue

AMERICAN APPLE CROP REPORT.

Interesting Figures.

Information from New York on Crop Report has been passed on to us by Gerald da Costa, Fruit Broker, London, as under:—

"There is a difference in the returns now to hand inasmuch that the crop estimated on September 1st at 33,390,000 barrels was re-estimated on October 1st to 33,104,000 barrels. [A barrel contains approximately 3 bushels.—Ed. "F.W."] It will be recalled that last season the crop amounted to 31,090,000 barrels, and the average over the last five seasons was 27,491,000.

"To facilitate comparison, the estimates given for the New England group give a total crop of late barrels amounting to 15,067,000, as against 15,711,000 last season, the five years' average being 13,721,000. You will see by the above figures that the crop of this group is about average, but somewhat below last year.

"The Idaho group has a crop of 14,365,000 compared with 11,000,000 barrels last year, and 10,197,000 barrels average for the last five years. This group, with its steady and rapid increase furnishes the outstanding feature of the entire crop.

"New York has 4,680,000 average, compared with 6,000,000 barrels last year, and a five year average of 4,945,000 barrels.

"The quality of the crop in Maine and Vermont is only fair, much of the fruit being small, but the crop for Massachusetts, Rhode Island and Connecticut is better, though undersized. Maine has 620,000 barrels compared with 232,000 barrels last year.

"Pennsylvania is estimated at 1,227,000 barrels; last year was 1,216,000 barrels. Virginia has 1,760,000 barrels, or an increase of 660,000 barrels. West Virginia 1,159,000 barrels, compared with 881,000 barrels last season.

"Michigan estimated with 1,194,000 barrels, compared with 1,699,000 barrels last year.

"Arkansas, which had 520,000 barrels in 1922, has 741,000 barrels this year.

"Washington has the greatest number of boxed Apples, an estimate being 27,720,000 boxes compared with 21,312,000 last year.

"The estimate from Oregon is given as 5,076,000 boxes, against 3,718,000 in 1922.

"Idaho estimated at 3,933,000 boxes was 1,008,000 increase on last year."

APPRECIATION.

Wonga Park, V.,

6/11/23.

"There has been a lot of information beneficial to an orchardist in the various issues of the 'Fruit World.'"

F. T.

NEW GRAPES PROVE SUPERIOR.**Seven Improved Varieties Developed by Geneva Station.**

Among the new fruits recently developed by the New York Agricultural Experiment Station at Geneva and now being distributed for further testing through the New York State Fruit Testing Co-operative Association, Inc., are seven new varieties of Grapes which have proved their superiority to existing varieties grown in the station vineyards. Four of these new Grapes, Brocton, Ontario, Portland and Ripley, are green Grapes; two, the Dunkirk and the Urbana, are red Grapes; and one, the Sheridan, is a black Grape, which it is thought will compete with Concord. Some of these new sorts are already

well known to Grape growers, while all of them are deemed worthy of trial for commercial and home planting.

Several of the new fruit varieties developed by the station horticulturists are now established commercial sorts, and it is believed that in time some of the new station Grapes will replace varieties which are now regarded as standard.—"National Nurseryman."

WHEN TOOLS WERE REALLY VALUABLE.

Tools were valued in the early days because such were hard to get. There was no waste of farm equipment then; the spade and the scythe were valued as much as the shotgun. Conditions have changed during the past

century. The progress is now marked by an abundance of tools, implements and machines for every purpose in agricultural production and harvesting—in abundance of machines so great that we see waste on every hand. Ploughs, tillage machines and harvesters neglected and exposed to the weather, rust and wear out before giving half service. The waste of tools, implements, machines and articles of farm equipment amounts to many thousands of dollars each year.

"And Nature holds, in wood and field,
Her thousand sunlit censers still;
To spell of flowers and shrubs we yield

Against or with our will."

—Whittier.

.. THE ..

Farmers and Settlers' Co-operative Insurance Company of Australia Ltd.

Capital, £100,000.	Subscribed Capital, £70,000.	Paid Up, £35,000.
------------------------------	--	-----------------------------

THIS IS THE ORCHARDISTS' CO.

for insuring his buildings, fruit in store, Workers' Compensation, and other risks. An orchardist who becomes a shareholder and places his insurances with this Company participates in the profits which his own business creates. Thousands of farmers and orchardists are already shareholders. Write for particulars.

Victorian Branch:

Directors—Mr. SYDNEY SAMPSON, M.H.R., Mr. DUNCAN McLENNAN, Mr. P. H. H. IBBOTT.
Manager—H. L. CARROLL

Address: 360 Collins Street, Melbourne
YOU are invited to become a shareholder.

AGENT—LAWFORD'S FRUIT EXCHANGE PTY. LTD., 60 Queen Street, Melbourne, and Williamson's Road, Doncaster.

AGENTS WANTED.

ESTABLISHED 1866.

TELEPHONE 2979

Watters' Seeds

For the CHOICEST VEGETABLES and most BEAUTIFUL FLOWERS sow our Seeds

We are Headquarters for—

Hunter River Lucerne

Cleaned by our Special Machinery, and free from all weeds. SPECIAL QUOTATIONS for Cwt. or Ton lots on application.

We have large stocks of the following in best re-cleaned Seed: Broadleaf Dwarf Essex Rape, Grasses, Clovers, and all varieties of Green Fodder and Root Crop Seeds

Write at once for our Special Quotations.

Spraying Oils, Fungicides, Raffia

Illustrated Catalogue and Calendar, post free.

WATTERS & SONS

251 & 253 Swanston St., Melbourne

WOOD-WOOL

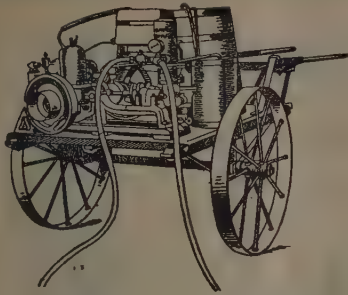
FIRST QUALITY AND AUSTRALIAN
Less than half the cost of Imported.

A Leading Firm of London Importers report on a large shipment of pears packed in trays with our WOOD-WOOL. This consignment certainly travelled well and arrived in very good condition, the wood-wool used in packing appearing quite suitable.

Write for quotations

LAWFORD'S FRUIT EXCHANGE PTY. LTD., DONCASTER, VIC.

(Sole distributors)



ASK FOR CATALOGUE
POWER and HAND
SPRAYERS



THE BAVE-U IS THE PIONEER AUSTRALIAN POWER SPRAYER

and has held its own against all comers for the past 14 years

RUSSELL & CO., Makers
BOX HILL, MELBOURNE

Read what Satisfied Users of the BAVE-U have to say

Extract from letter, E. Swan, Londrigan.

"I thought you would be interested to know how I have gotten with the new pump. We have just finished our Winter wash on the whole orchard, 7,000 gallons of lime sulphur and 500 gallons of oil, and the pump ran without any trouble whatever. I consider it about perfection in spraying outfits. The old pump which was purchased 8 years ago is just as reliable and as good as new now. Wishing you the success you deserve with your Sprayers."

Extract from letter, M. Jenkin, Nyah West.

"I am doing all sorts of work with engine of Sprayer, sawing wood and pumping, and it has done very good work and no trouble."

AGENTS:

South Australia: Premier Machinery Co.
Morphett Street, Adelaide.

West Australia: Gibbs, Bright & Co.
Fremantle

Established 1864

EDWARD H. LEWIS & SON ^{LD}

SALES BY PRIVATE TREATY

SHIPPING

450

NUMBER

Head Offices: **COVENT GARDEN, LONDON**
~~~~~ AND ALL PRINCIPAL PORTS ~~~~~

Chief Australasian  
Agents:

**F. J. BENNETT & CO., Hobart Tas.**

# Fruitgrowers, Exporters

Throughout Australia and New Zealand

— Send your —

APPLES, PEARS, ORANGES

— to —

# T. S. JOHNSON & CO.

Fruit Salesmen

ESTABLISHED IN

## Liverpool, Manchester, Leeds, Hull

A population of 40 million people, all large fruit eaters,  
is reached through these centres.

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### *Some Good Reasons why Australian Fruit should be sent to* **LIVERPOOL MANCHESTER AND HULL**

- (1) These ports serve the large populations in the North and Midlands of England, also Scotland, Ireland, and Continental Markets.
- (2) Some of the largest coal fields are situated in these centres, the hardworking population are big fruiteaters.
- (3) Quick unloading and despatch of fruit is provided.
- (4) Cold storage facilities are available.
- (5) Direct shipments to Liverpool, Manchester and Hull save extra handling charges as is the case when fruit is transhipped from London.
- (6) Shipments should be made to T. S. Johnson & Co., because they give you the choice of the three ports and their efficient selling Organisations which are established therein.
- (7) T. S. Johnson & Co.'s regular circle of buyers and wide distributing channels enables them to secure highest prices.
- (8) The way to develop new markets is to concentrate on those British outports which are earnestly striving to increase their trade in fruit with Australia.

WRITE FOR ADDITIONAL INFORMATION.

### Agents :

VICTORIA.—Messrs. INTERNATIONAL FRUIT & MERCANTILE CO., 410-414 Flinders Lane, Melb.

TASMANIA.—Messrs. E. R. COTTIER & CO., 82 Collins Street, Hobart.

SOUTH AUSTRALIA.—Messrs. BROCK & BATCHELOR LTD., Port Adelaide.

WESTERN AUSTRALIA.—GEO. EVANS & CO., 46 Mouatt Street, Fremantle.





Don't Let the Birds  
Eat Your Profits —  
**SCARE THEM!**

With BRUNNING'S "DEMON"  
**Automatic BIRDSCARER**  
The Greatest Boon to Fruitgrowers!

- |                                 |                                            |
|---------------------------------|--------------------------------------------|
| 1. Saves time and labor.        | 5. No parts to get out of order.           |
| 2. Lasts a lifetime.            | 6. Thoroughly proved throughout Australia. |
| 3. Requires no attention.       | 7. Simple, cheap and effective.            |
| 4. Birds do not get used to it. | 8. Working costs especially low.           |
|                                 | 9. When charged, lasts for 16 hours.       |

Write for Special Leaflet—Free.

F. H. Brunning  
Pty. Ltd.

# BRUNNINGS

64 Elizabeth St.,  
Melbourne

Don't WONDER what your crop will be!  
MAKE SURE by using——

## "HARBAS"

THE SELF EMULSIFYING RED OIL.

Many Oils LOOK like  
"HARBAS"

But DON'T ACT like it.

Use "HARBAS" for  
*Red Spider and all Scale and Aphis Pests*

Use also

## "Harola" Lime Sulphur

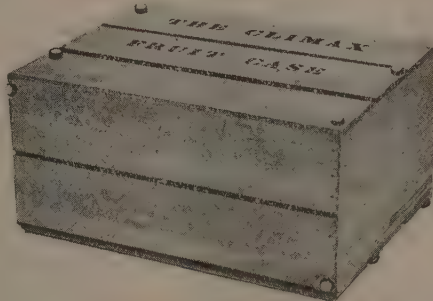
The Best Fungicide on the Market.

### RETAIL SELLING AGENTS FOR VICTORIA:

Geo. Bailey, Narre Warren.  
Lawford's Fruit Exchange, Doncaster.  
Law, Somner Pty. Ltd., Block Place, Melbourne.  
F. R. Mellor, 440 Elizabeth St., Melbourne.  
Nyah Fruitgrowers' Co-op. Ltd., Nyah West.  
Railway Packing Co. Pty. Ltd., Irymple.  
Tresco Fruitgrowers' Co-operative Assoc. Ltd., Tresco.  
S. J. Bevan, Avoca.  
S. S. Gault, Somerville.  
Tyabb & Dist. Cool Stores, Tyabb.

Wholesale Representative for Victoria—  
ESMOND RUSSELL, 60 Queen Street, Melbourne.

## The "CLIMAX" Patent EXPORT FRUIT CASE



The "Climax" Case provides automatically a uniform and complete system of airways, both horizontally and perpendicularly, exposing the entire surfaces, top, bottom, and both sides; therefore every apple is within five inches of an airway and cold fresh air.

It is self-isolating on the lorry, in cool store, railway truck, and ship's hold—i.e., from grower to consumer.

It facilitates refrigeration, also the regulation of temperature in cool store and ship's hold, and should result in the fruit landing in better condition and your getting much better average prices than hitherto obtained. The insulators are attached while constructing the ordinary dump cases.

### QUOTATION.

"Climax" Insulators, per set of 12, sufficient for one case—3d. nett. Delivered to Boat or Rail, Melbourne. Order early, and state date you wish them delivered.

ADDRESS TO  
**W. MARTIN GREEN, Baxter, Victoria**

# The Fruit Trade

## Every Firm should be Officially Represented

if only by a line or two—Our Readers are Your Clients. It is an able and wise introduction, and when you go through the fruit districts our Readers will have already known you through us. It pays best to send Consignments Regularly—Not Occasionally—to the best markets, by doing so you strike the rising and falling markets and make a fair average for the season.

A ten times wider and better distribution will ensure a ten times greater production, at more payable returns. It is large and valuable exports from settled industries that make a nation prosperous.—Ed. "F.W."

This Journal is the recognised representative of the FRUIT TRADE in the Southern Hemisphere.

REPRESENTATIVE FIRMS, FRUIT MERCHANTS, AGENTS, EXPORTERS.  
Advertising in this Journal.

### NEW SOUTH WALES.

**Sydney.**  
Chilton, F. City Fruit Markets.  
Hopkins & Lipscombe, Fruit Exchange.  
Rogers, F. H. G., Fruit Exchange.  
Rule & Beavis, Fruit Exchange.  
Wade, Noel, V., Royal Exchange (representing the North of England Fruit Brokers Ltd., Manchester, Eng.).

### VICTORIA.

**Melbourne.**  
Coastal Farmers' Co-op. Society, Western Market.  
Davis, J., Western Market.  
Lister, G., Western Market.  
Mills & Co., J. B., 9 Queen Street (representing Nothard, Lowe & Wills Ltd., London).  
Mills, A., & Sons, Western Markets.  
McClure, Valentine & Co. Pty. Ltd., 49 William St.  
Mumford, J. G., 449 Flinders Lane.  
Pang & Co. Ltd., H. L., Little Bourke St.  
Silbert, Sharp & Davies, Western Markets.  
Stott & Son, T., Western Markets.  
Tim Young & Co., Western Market.  
Vear, F. W., 49 William Street.  
Wade & Co., H. M., 439 Flinders Lane.  
Woolf, G., Western Market.

### QUEENSLAND.

**Brisbane.**  
Barr, A. S., Fruit Exchange.  
Collard & Mackay, Fruit Exchange.  
Cooksley & Co., Fruit Exchange.  
Finlayson & Son, Fruit Exchange.  
Geeves, H. V., Fruit Exchange.  
International Fruit and Produce Co., Fruit Exchange.  
Robsons Ltd., Fruit Exchange.  
W. J. Whitten & Co., Fruit Exchange.

### WESTERN AUSTRALIA.

**Perth.**  
Wills & Co. Ltd., G., Exporters.

### SOUTH AUSTRALIA.

**Adelaide.**  
Wills & Co. Ltd., G., Exporters.

### TASMANIA.

**Hobart.**  
Jones & Co. Ltd., H., Fruit Exporters.  
Peacock & Co., W. D., Fruit Exporters, and at London.

### NEW ZEALAND.

**Auckland.**  
Radley & Co. Ltd., Fruit Auctioneers.  
Turner & Growers Ltd., City Markets.

### Dunedin.

Co-operative Fruitgrowers' of Otago Ltd.  
Paterson, Thos., & Co., Vogel Street.  
Central Produce Mart, Moray Place.

### ENGLAND.

**London.**  
Bradnum, Jas., Covent Garden.  
Da Costa, Gerald, Covent Garden.  
Jacobs, E., & Sons, Covent Garden.

Lewis, Edward H. Son Ltd., Covent Garden.  
Margeson & Co. Ltd., Covent Garden.  
Moore & Co. Ltd., F.W., 8 Arthur Street, London Bridge.  
Monro, Geo., Ltd., Covent Garden.  
Nothard, Lowe & Wills Ltd., Tooley Street.  
Poupart, T. J., Covent Garden.  
Ridley, Houlding & Co., Covent Garden.  
Swann & Co., 3 Salter's Hall Court.

### Hull.

"Port of Hull," E. Bechervaise, 51 Moorabool-street, Geelong, Vic.  
White & Son Ltd.

### Liverpool.

J. Adam, Son & Co.  
T. J. Johnson & Co., also Manchester and Hull.  
Roger White & Co., 37 Victoria Street.

### Manchester.

North of England Fruit Brokers Ltd.

## COMPARATIVE WEIGHTS AND MEASURES.

### English Fruit Weights.

Apples, sieve is equal to 1 bushel, generally 38 lbs.  
Cherries and Currants,  $\frac{1}{2}$  sieve equal to 24 lbs.  
Gooseberries, Plums,  $\frac{1}{2}$  sieve, equal to 28 lbs.  
Pears, sieve, equal to 50 to 56 lbs.  
**Foreign Weights.**  
Apples, Canadian, barrel, equal to 140 lbs.  
Apples, American and Nova Scotian, barrel, equal to 120 to 130 lbs.  
Pears, Californian case, equal to 40 lbs.

## British and Australasian Market Reports

### Great Britain.

London (22/11/23)).

A consistent demand is shown for Apples, but with very large arrivals of imported fruit, prices have eased. Best samples of English cookers maintain their price at from 8/- to 12/- per bushel; Cox's also meeting a steady enquiry. In imported Apples, all varieties of boxed fruit, including British Columbian, Californian, Oregon and Washington State, are steady at from 8/- to 12/- per box, with a few Cox's up to 18/-; and in barrelled Apples Nova Scotian range from 16/- to 26/-; Canadian, 22/- to 35/-; Virginian, 20/- to 30/-; Hudson River, 18/- to 26/-; and Maine and Boston, 20/- to 30/- per barrel in each case. Reports of shipments already arranged for show that there will be ample supplies of Apples for the Christmas trade.

Pears now confined to American

Keiffers in barrels, and Californian and Washington boxed fruit, principally Winter Nelis. Prices a point firmer.

Bananas, Canary, 9/-, 24/-; Grapes, English, 1/6 to 6/- lb.; Belgian, 1/- to 2/6; Oranges, Cape, 35/-, 40/- box; Jamaica, 21/- box; Malaga, 360,  $\frac{1}{2}$  case, 13/6, 16/-; Murcia, 300,  $\frac{1}{2}$  case, 16/-, 23/-; Peaches, English, 12/-, 24/-.

### New South Wales.

Sydney (29/12/23).

No Tasmanian Apples were available, but local Carringtons, the first of the new season, realised to 25/- per bushel case; cooking Apples sold to 16/- per bushel case. Bananas were firm, the demand being good, and supplies low. American Oranges from the steamer "Sonoma" were cleared at from 20/- to 23/-.

Apples.—Local Carringtons, choice coloured, 5/- to 25/- per bushel case; cooking, 5/- to 16/- per bushel case; Tasmanian F.C., 14/- to 16/-; S.T.L., 14/- to 22/-; Democrats, 20/- to 30/- Croftons, 18/- to 24/-; Victorian Yates, 15/- to 26/- Apricots.—Choice, 6/- to 7/-; medium, 3/- to 5/- per half-bushel case, small 4/- per bushel case; Victorian, choice, 11/- to 15/- medium and inferior, 5/- to 9/- per bushel case. Bananas.—Choice, to 32/-; other grades, 12/- to 19/-; small and inferior, 8/- per case. Citrus Fruits.—Lemons, choice, 14/-; medium, 8/- to 10/-; small, 5/- to 7/-; Valencia Oranges, choice, 20/- to 24/-; medium, 14/- to 18/-; small, 7/- to 12/- per bushel case. Cherries.—6/- to 13/- per quarter bushel case. Gooseberries.—2/6 to 6/- per quarter bushel case; Tasmania, 5/- to 8/- per quarter bushel case. Plums.—Light, 1/- to 5/-; dark, 2/6 to 7/-; red, 2/- to 9/- per half-bushel case. Passion-fruit.—Local, 4/- to 12/- Pineapples.—Queens, 30/- to 35/- per case. Ripleys, 16/- to 20/- Peaches.—Choice, 10/- to 12/-; medium, 5/- to 7/-; small, 2/6 to 3/6 per half bushel case; Victorian, 18/- to 24/- per bushel case.

### Western Australia.

Perth (29/12/23).

Apples, Yates best, 10/- to 22/-; small, to 17/6; new season's cooking, three-quarter bushel, to 17/-; half-bushel, to 8/9; Peaches, Prime, 16/- to 20/3; medium, 9/- to 13/-; small and over-ripe lines, to 5/6; Apricots, best, 9/- to 13/-; medium, 5/- to 8/-; over-ripe, to 4/6; Plums, dark, best, 16/- to 20/3; small, to 13/-; Shiro, prime, 8/- to 10/-; small, to 5/-; Cherry Plums, best, 6/- to 8/-; small, to 4/-; Cherries, trays, to 30/9; half-trays, to 22/3; half-bushel, to 20/-; Strawberries, to 12/3; Passion-fruit, three-quarter bushel, 31/6; quarters, to 22/-; Figs, three-quarter bushel to 10/-; trays, to 5/-; Oranges, three-quarter bushel, best, 11/- to 15/3; others, to 8/-; Lemons, three-quarter bushel, 7/- to 11/-; large, to 4/-; Grapes, open, to 14/3.



## Victoria.

Melbourne (29/12/23).

The following are the wholesale quotations ruling at the Western Market:—Apples, choice eating, good eating, 10/-, 16/-; choice cooking, good cooking, 8/-, 12/-; Apricots, choice dessert, good dessert, 4/-, 6/6; medium dessert, 2/6, 3/6; Bananas, Queensland, 24/-, 23/- double; Figs, 8/-, 12/-; Gooseberries, 8/-, 11/-; Lemons, Victorian, 8/-, 13/-; Peaches, choice dessert, good dessert, 7/-, 12/-; medium dessert, 4/-, 6/-; Cherry Plums, 4/-, 5/-. Holiday tone prevailing.

## South Australia.

Adelaide (28/12/23).

Apricots, 8/-, 12/-; Special samples, 14/- case; Peaches, 10/-, 12/-; best quality, 12/-, 16/-. Plums are coming on to the market, also new season's Apples. Prices are much lower than prior to the holidays. A good crop of Apples is reported in most of the South Australian districts.

## Queensland.

Brisbane (31/12/23).

Bananas, good quality, 6d. to 8½d.; second quality, 3d. to 4½d.; ladies' fingers, 4d. to 11d.; sugars, 6d. to 11d. doz.; Apples, Ripley Queens, 1/- to 3/6 doz.; Papaws, prime, large, 8/- to 11/-, 7/- to 9/- per dump, half bushel, 3/- to 5/-; Passion-fruit, first quality, 4/- to 6/-; Ripley Pines, 4/- to 8/- per case; smooth, 6/- to 8/-; Lemons, local, 3/- to 5/6 per half-bushel case; South Australian Lemons, repacked, 22/6; Italian, 25/- to 26/-; Sydney (wrapped), 10/- to 12/-; Cherries, 9/- to 14/- per 12lb. box; Peaches, special, 10/-; first quality, 5/- to 8/- per half-bushel case; tray, 2/- to 4/6; Apricots, 4/- to 12/- per half-bushel case; per tray, 2/6 to 5/6; Apples, Yates, 2½, 22/- to 24/-; 2½, 20/- to 22/6; small, 8/- to 12/-; eating Apples, Stanthorpe, 20/- per bushel case, 6/- to 9/- per half-bushel; cooking, Stanthorpe, 5/- to 13/6 per bushel case; small, 2/6 to 3/-; Nectarines, 4/- to 8/- per half-bushel case; Grapes, white, 4d. to 8d. per lb.; Black, 5d. to 7d.; Black Muscatels, 1/- to 1/6; Plums, eating, good quality, 6/- to 9/-; poor quality, 4/- to 5/-; cooking, 4/- to 6/- per half-bushel case.

## New Zealand.

Dunedin (18/12/23).

Reilly's Central Produce Mart Ltd. report:—Strawberries, choice, 1/6 to 2/3½; soft, inferior, 10d. to 1/3 pottle; Apricots, 7½d. to 11½d.; Peaches, 5d.

to 10½d.; Apples, American, 27/6; Lemons, 50/-; Oranges, Adelaide, 27/6; American, 40/-; Bananas, ripe, 35/-; American Grapes, choice, 33/- per barrel; Black Currants, 3½d. to 5½d.; Red Currants, 4d. to 7d.; Gooseberries, green choice, 2½d.; others, 1½d. to 2d.; ripe, 4d. to 8½d.; Raspberries, 11d.; Loganberries, 8d. to 11d.; Local Grapes, 2/8, 2/9; Christchurch, 2/3 to 2/4; Cherries, choice, 1/1 to 1/8½; inferior, 5d. to 9½d.

## THE TRULY GREAT.

Science and Art are infants yet,  
And those who watch them grow  
See more and more, as time goes on,  
'Tis little that we know.  
A fool may boast how much he knows,  
And fools, perchance, pay heed;  
Who knows how little he doth know,  
That man is wise indeed.

Some spend their lives in making gold,  
And when their heads are hoar  
Are counted men of wealth and rank—  
Yet often they are poor.  
But the man who, in the eve of life,  
Can look back on a youth  
Whose strength has helped his fellow-men—  
That man is rich in truth.

There are mighty men who boast their strength,  
And dauntless men who lead  
Victorious armies; men who tell  
Of many a gallant deed—  
But the man who owns his weakness, and  
His conscience dare not wrong.  
The man who stands alone for right—  
Oh, he is brave and strong!

## WITH OUR ADVERTISERS.

T. J. Poupart Ltd., of Covent Garden, London, England, who handle large quantities of Australian fresh fruit, have recently opened up a new salesroom in 3 Love Lane, Eastcheap, Eng. (the centre of the wholesale grocery trade) for the sale of dried and tinned fruits and fruit pulp. Full particulars are obtainable from their agents in all States.

The Case kerosene farm and general purpose tractors have many advantages for orchard work. The 12/20 H.P. model is the most popular machine with fruitgrowers.

Brunning's Demon Automatic Birdscarer is a useful machine for the orchardist. Full particulars advertised elsewhere in this issue.

The Latham dehydrator erected in Tasmania some time back is reported to be working satisfactorily.

Sailing dates of the Australian Commonwealth Line of Steamers for the next five months are published on page 50. Special facilities are offered for the carriage of fruit.

Australian Wood-Wool is obtainable from Lawford's Fruit Exchange Pty. Ltd., Doncaster, Vic.

Wednesday, 30th January, 1924  
AT 3 O'CLOCK

## EXECUTORS' REALISING SALE BY AUCTION

Of the late CARL AXEL NOBELIUS' Famous and Completely Appointed O.R.C.-ARD and FARM Property on the Tamar River, near LAUNCESTON, Tasmania, as a Going Concern with all crops, to wind up estate.

ALFRED HARRAP & SON, Auctioneers of Cameron Street, Launceston, have been instructed by the NATIONAL TRUSTEE COMPANY of 113 Queen Street, Melbourne, Executor of the Will of CARL AXEL NOBELIUS, deceased, to offer by auction as above at their rooms, No. 84 Cameron Street, Launceston, the well-established and widely known Orchard property and farmlands situated at Freshwater Point on Tamar River, 7 miles by river from Launceston. Regular boat service.

The property comprises an area of 493 acres—230 acres of which is orchard—100 acres cultivated river flats, remainder being handy grazing and timber paddocks.

The situation as to soil, climate and other conditions is ideal, the late Mr. Nobelius having had the advantage of vast experience when selecting the property.

There is an extensive water frontage with private jetty, packing sheds, and all equipment for expeditious transport. The Orchard comprises about 30,000 trees (Apples and Pears) the varieties including most of the recognised good exportable kinds. First plantings in 1906, and thence onward.

There is an extensive system of tile draining, and the orchard has all along been cultivated and treated in most up-to-date manner.

BUILDINGS comprise a large brick HOMESTEAD, delightfully situated, 3 WORKMEN'S COTTAGES—BOARDINGHOUSE, MEN'S BARRACKS—12 STALL STABLE, BARN—WORKSHOPS and the PACKING SHED close to jetty is one of the largest in Australia.

Good road system on property. Ample water supply throughout. Effective shelter belts.

Four-roomed Cottage, Stabling, etc., on farm portion; also Sheep Yard, Sheep Dip, well fenced and subdivided.

All buildings well constructed and maintained.

Good road to Launceston, 10 miles distant. Handy to School, P.O., and Churches.

The property will be offered as a going concern, comprising complete working plant, live stock and accessories.

Terms:—15 per cent. deposit, balance annually over a period of 10 years. Interest 5½ per cent.

TITLE CERTIFICATE.

SOLICITORS—Messrs. FitzGerald & FitzGerald, 42 Market Street, Melbourne.

Further particulars from the Auctioneers or above-mentioned Company.

# Fruit Paper

E. H. COOPER, 59 William Street, Melbourne  
Telephone 6140

## SHIPMENTS NOW ARRIVED LOWEST PRICES

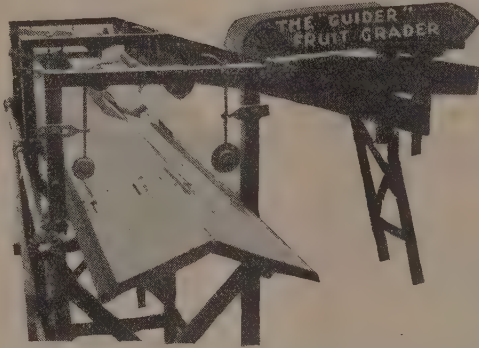
9 x 9—3555 Sheets.

10 x 10—2880 Sheets

# The GUIDER FRUIT GRADER

The latest labor-saving device on the Orchard

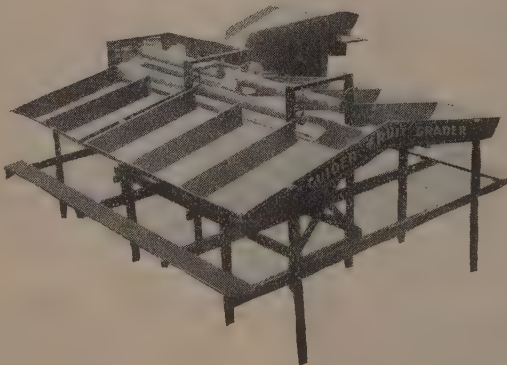
A well designed and faithfully constructed outfit which has won golden opinions from practical growers of all kinds of fruit.



The Guider Fruit Grader, "The Feeding Grader Unit." The Guider, when shipped, is 20 inches wide and 7 ft. long. Conveyor Feeder, 10 inches x 3 feet.

PUT TO THE TEST  
THE "GUIDER" IS BEST

YOU IMPROVE YOUR ORCHARD EQUIPMENT BY INSTALLING A GUIDER FRUIT GRADER.



The Guider Fruit Grader ready for use.

YOU NEED A GRADER!

The Guider is best. It guides the fruit into correct compartments.

No handling; no bruising.

## OUTSTANDING FEATURES:

Quick : Accurate : Durable : Cheap : Portable.

No bruising of the fruit.

No drop anywhere.

Works with hand or power.

GRADES  
ALL KINDS OF  
FRUIT

THE LATEST AND BEST IN  
FRUIT GRADING MACHINES.

Built to suit  
LARGE PACKING  
HOUSES

and  
for use on small  
Orchards.

~~~~~  
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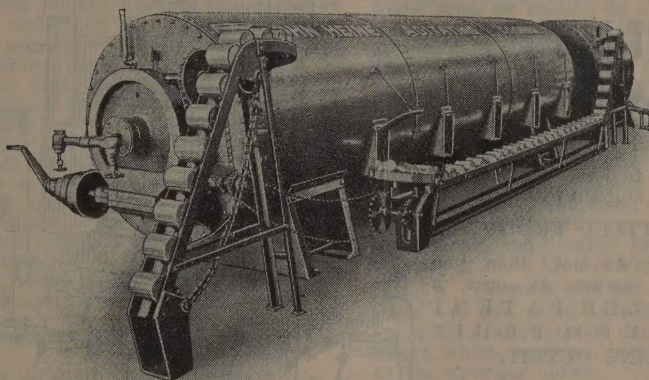
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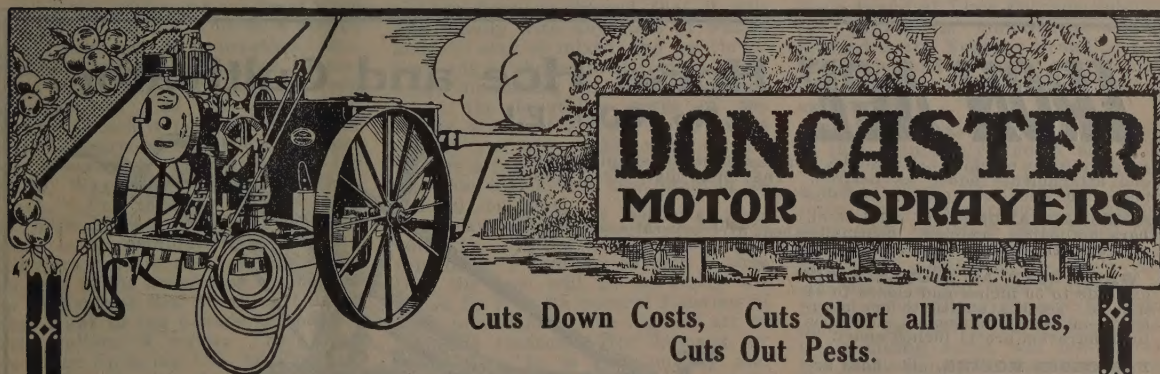
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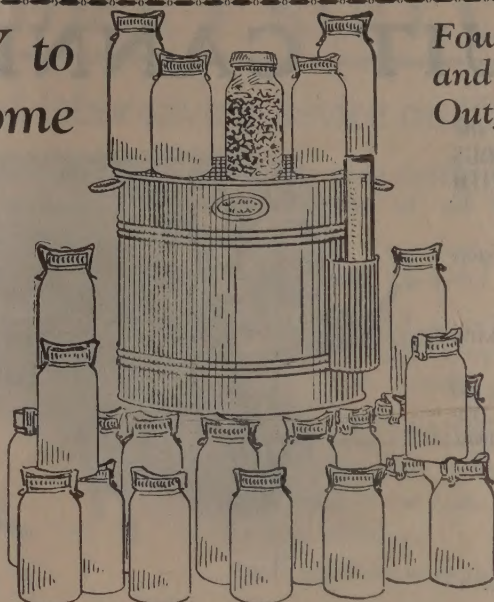
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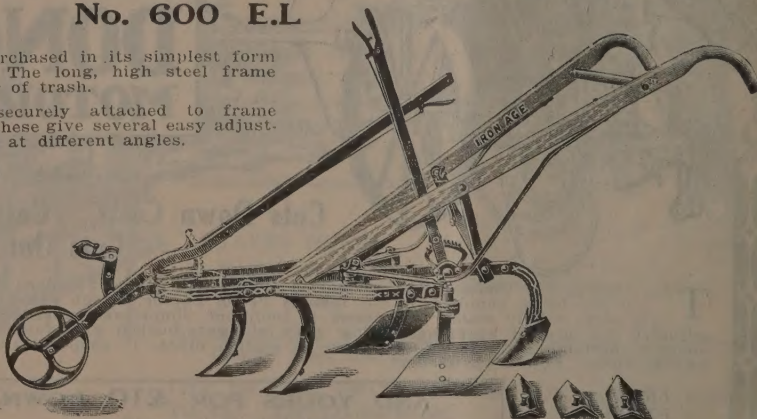
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**FOR CLOSE HOEING**, side hoes are  
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—also to take away soil from a  
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**AS A FURROWER** for manure, etc.,  
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the hoes together. Changed from  
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**AS ILLUSTRATED**, No. 600 E.L. is shown with lever wheel and Lever Expander. Packed weight, 83 lbs.  
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## The Control of Citrus Scale Pests

Spraying for Red Scale—White Wax  
—White Louse, etc.

(By Norman Allard, Spray Expert.  
Neptune Oil Co. Ltd.),

IN VIEW OF the very satisfactory export prices obtained this season for Oranges, the attention of many citrus growers will turn to this branch of marketing for the coming year's crops. In order to secure the highest returns in the export market the first and foremost necessity is the production of clean and sound fruit. As a result of the dry and unseasonable conditions of the past year, the control of various scale pests of the citrus has called for the utmost perseverance on the part of the grower.

At the time of writing the coming season promises to be just as trying as the last, and will call for all the care and ingenuity on the part of the grower who wishes to turn out a clean and sound sample of export Orange. It is needless to add that even on the local market the cleaner the fruit, the higher will be the prices realised.

This article is dedicated to those orchardists who are always willing to give due thought and consideration to any views and arguments which may help them in their fight against orchard pests.

In order to strike a sympathetic note at the outset, let us regard the fruit tree much the same as a human being, inasmuch as it breathes, eats, drinks, functions, and grows to maturity much the same as ourselves. Moreover, it has its pests and diseases, which if not attended to ultimately overcome it. The most common diseases of the citrus are the White Wax, Red Scale and White Louse. For the two first diseases the best known and most efficient spray is a combination of Neptune Red Spraying Oil and common washing soda in the proportion of one gallon of Neptune Red Spraying Oil and from eight to ten pounds of soda, to forty gallons of water. True, there are other Spraying Oils on the market, but in the following paragraphs the reasons will be given why the Neptune is the best and safest brand to use. The White Wax generally commences to breed out in December, and the Red Scale in January, both are ready for treatment towards the end of January or beginning of February. As in the case of human beings, so also in the citrus, these diseases are more easily eradicated

at the start before they get a grip on the tree. Also we must take into consideration the state of the tree and the capacity to withstand the shock of treatment.

For instance, if the tree is suffering from a long dry spell, in which case the sap is not flowing freely, and

the tree is not in good heart, it is in much the same condition as an ill-nourished person who is suddenly stricken with disease, and has neither the strength to fight it, nor the endurance to undergo the severe treatment which the nature of the disease may call for. In this connection it cannot be too forcibly impressed on the orchardist the necessity to keep the ground well cultivated during the spraying and summer months, in order that the tree may be in good fettle for the spraying operations.

It is noteworthy that whereas the single winter manuring was until lately in vogue, many growers are now adopting a summer manuring of some quick acting manure, such as blood and bone. This gives the tree added strength to not only take the spray, but to throw off the scale which the spray is destroying, for once again to use our comparison, the stronger the patient the easier and quicker the cure.

IN APPLYING a miscible oil to a fruit tree, which is attacked with scale, it is sought by this means to smother the breathing pores of the scale and so suffocate it. We must remember, however, that like ourselves the tree has its breathing organs, and that these are to be found in the leaves. We have, therefore, to discover an oil which will affect the breathing organs of the scale, but not those of the tree.

Scientific chemistry has given to the grower the Neptune Brand, which stands alone in this regard. The oil has been so treated that it will mix readily with any class of water, and will stay so mixed, and not throw back any of the original free oil. Thus while smothering the scale it will not affect the breathing pores of the leaves, and further still, as it works quickly and will readily wash off the tree by a fall of rain after the spraying, thus leaving the tree again in its natural condition.

A heavy oil, or one that is hard to emulsify, by the same token, will remain on a tree for so long a time that the tree will be adversely affected by it in its natural function of fruit production. The highest art of scientific treatment for humans, or trees alike, is to cure quickly and well, and restore as quickly as possible the natural healthy standard. It is also worthy of mention that the tree drinks in moisture from the atmosphere through its leaves, and this fact makes the Neptune brand of oil the best and safest to use for the reasons previously given.

Let us now consider the correct treatment of the scale pest known as White Louse. This disease may be checked to a certain extent with Spraying Oil, but the only perfect and satisfactory cure is Lime-Sulphur Solution. This disease is the most awkward of all to control, for the following reasons:—The best killing strength at which to use the Lime-Sulphur is in the proportion of 1 to 15 of water. In the summer time

this strength may be used if the spray is confined to the butts and branches of the tree, but in the cooler months of winter the whole tree may be sprayed with this strength.

At this time, however, the unenviable situation arises that while the orchardist may wish to spray the whole tree, he cannot do so because the tree is carrying a crop of full-grown fruit, which he wishes to leave hanging until the hotter months of the early summer, when higher prices may be obtained. When the hotter months come, and the tree has been relieved of the fruit, it is then too late and too risky to spray the whole tree at the one in fifteen strength. Furthermore, by this time the White Louse has worked its way out on to the laterals and smaller twigs. The only thing to do by this time is to

choose a cool day

when the new fruit is well set and spray at a strength of one to 30 of water, which, however, is not as good as the stronger spray.

During the present season, many growers are in this predicament, but they mostly have only themselves to blame, because White Louse invariably commences at the butt of the tree and works up, and can be sprayed and killed at any time of the year, if taken when first noticed on the butts, and sprayed with the one in fifteen strength. This disease, more than any other, teaches the grower the necessity of applying treatment in the early stages, thus saving much time, worry and expense. In choosing a brand of Lime-Sulphur Solution the grower is confidently recommended to the Neptune Brand, as it is the purest and strongest on the market, and carries the company's guarantee with it.

Another disease worthy of mention is that commonly known as Black Smut. This is a fungus disease which lives on the honeydew of the scale pests. The remedy is self-evident; keep the scale pests under control and Black Smut cannot exist. A fact well worth the grower's consideration is that once a tree is infested with Black Smut, the treatment of the scale pests by fumigation while killing same, will not remove the Black Smut, for that season, and thus the grower would still have dirty fruit. Neptune Red Spraying Oil combined with soda will both kill the scale and remove the Black Smut at the same time, thus ensuring a clean crop of fruit for the same season.

In conclusion, keep your orchard well worked, keep your trees well fed, well sprayed and healthy, and use Neptune Oil—it pays.

An interesting booklet, entitled "Clean Fruit," containing much valuable information regarding the treatment of orchard pests and diseases has been compiled by the Neptune Oil Co., River-street, Richmond, Vic. Copies are obtainable free on application.—(Advt.).



## New Zealand

### Crop Anticipations.

..Later news regarding the fruit crops in New Zealand are contained in the following reports, sent by the Director of the Horticulture Division from his officers.

(as at the end of November, 1923):—

**Auckland.**—Apples: Setting indifferent, crop below average. Lemons: Phenomenal flowering. Oranges: Heavy blossoming. Peaches: Short crop; a few varieties average, such as Paragons, Prizetaker, etc. Plums (Jap.): Light. Strawberries: average. Nectarines: Light. Pears: Considerably below average.

Generally speaking the crops of pip and stone fruits will be on the light side this season.

Strawberries are having a good year, and Logans are now on the market.

Phytophthora infestans is giving some trouble to a number of growers of Tomatoes under glass.

Owing to humid conditions, Black Spot is prevalent.

(J. W. Collard).

**Thames.**—Apples: Setting only fair, most varieties. Delicious light. Crop very clean to date. Apricots: Light. Considerable Brown Rot. Lemons: Good settings. Peaches: Fair. Nectarines: Pears, Plums: Light. Plums (Jap.): Average. Tomatoes: Heavy yields anticipated outdoors and crop well forward.

(N. J. Adamson).

**Waikato.**—Apples: Most varieties light. Wet weather during pollinating period has caused light setting, especially on Delicious. Apricots: Very light. Cherries: Below expectations. Gooseberries: Very good crops generally. Prices very fair. Lemons: Looking well. Crops have set well. Nectarines: Medium. Very little indications of Brown Rot so far. Oranges: Fair. Peaches: Crops below expectations. Brown Rot noticeable in many varieties. Pears: Not as heavy as expected. Much fruit fell after setting. Plums: Light. Plums (Jap.): Fair average. Strawberries: Fair quantities harvested. Dry weather and hot winds retarded development of the balance. Plantations looking well. No blight observed so far.

(T. E. Rodda).

**Poverty Bay.**—Apples: Fair. An exceptionally heavy drop of fruit occurred—25 per cent. loss. Apricots: Light to fair. Exceptionally heavy drop (50 per cent. loss). Cherries: Good crops—few grown. Gooseberries: Very heavy crops. Lemons and Oranges: Good crops. Nectarines: Light to fair. Heavy drop (25 per cent.). Peaches: Fair to good crops. Pears: Good crops; Black Spot much in evidence. Plums: Only fair. Strawberries: Fair to good. Tomatoes: Ripening under glass. Walnuts: Average.

The exceptionally heavy drop of set fruit is attributed to wet spring, followed by hot westerly gales.

(M. Davey).

**Hawke's Bay.**—Apples: Gravenstein light to medium; C.O.P.: Light; Wolseley: Very light, 80 per cent. less than last season; Dunn's, Jonathan, Delicious: Light, 30 per cent. less than last season; Sturmer: Light to medium; Dougherty: Medium. Black Spot will reduce the output to light. Other varieties: Light to medium. The crop in the main will be about 30 per cent. less than last season. Apricots: Medium to heavy. Cherries: Light to medium. Gooseberries: Good average. Lemons: Good show of bloom. Nectarines: Light to medium. Peaches: Early varieties very light; midseason and late varieties medium. Pears: W. Nelis and Josephine—Very light; Williams and L.B.J.—Medium. Other varieties—Light to very medium. Crop in the main 20 per cent. below last season. More Black Spot than usual, but well under control at present. Plums: Medium to heavy. Raspberries: Light to medium. Strawberries: Heavy crop now being marketed. Tomatoes: Heavy crop indoors, ready for market. Walnuts: Very light.

(W. H. Rice).

**Manawatu & Wairarapa.**—Apples: Good average setting, not as heavy as last season. Apricots: Good setting. Cherries: Good average crop. Gooseberries: Heavy. Nectarines and Peaches: Fair. Pears: Good average crop. Plums: Good average. Plums (Jap.): Heavy in some localities. Raspberries: Fair. Strawberries: Heavy.

At time of writing rain badly needed for Strawberry crop. All fruit about three weeks later than last season. Weather conditions favourable for spraying operations.

(J. W. Whelan).

**Nelson Central.**—Apples: That a heavy crop does not always follow a heavy blooming is apparent this season. Dunn's are light. C.O.P. medium. Gravenstein mostly good. Jonathan good to heavy; some orchards where heavy crops were secured last year are lighter. Delicious: Light to medium. Statesman: Medium. Worcester: Light to medium. Sturmer: Very fair to good. Taking the crop all through, it is very doubtful if there will be as much fruit as last season, but the percentage of good marketable fruit should be greater, as Black Spot is not so much in evidence up to the present time. Apricots: Light. Other stoned fruits insignificant. Pears: Though a heavy blooming, very few trees have heavy crops. Williams: Light, but clean. Winter Cole and Nelis are light, others patchy. Strawberries: Quantity is very limited, and shows a decrease on last season.

(J. H. Thorp).

**Motueka.**—Apples: Not as heavy setting as anticipated by blossoming. Delicious and Dunn's short. Other varieties about average. Crops on the whole very clean from Black Spot. Apricots: Only fair. Good quantity dropping. Cherries: Good average. Better than last season. Traces of Brown Rot, especially late varieties. Gooseberries: Good average. Nectarines: Only very medium. Peaches: Light. Pears: About average crop on whole. Black Spot noticeable on Williams' and Louise Bon. Crop somewhat cleaner than last season. Plums: Very fair crop. Raspberries: Good average. Strawberries: Now being picked. Fair crop. Short season owing to dry weather. Tomatoes: Inside grown being marketed, good quality; outside going ahead and looking well. Walnuts: Considerable dropping, but good average crop.

(G. Stratford).

**Marlborough.**—Apples: Fair average. Sturmers heavy; Delicious, light. Apricots: Good crop, except where trees have been flood damaged. Cherries: Very fair. Gooseberries: Good average. Nectarines and Peaches: Fair average. Pears: Medium to light crop. Plums: Good. Plums (Jap.): Heavy. Strawberries: Good crop, but curtailed by dry weather. Tomatoes: Medium crops under glass. Walnuts: Average crop.

Sour sap, resulting from abnormally wet winter, has caused serious losses to many orchardists, in some instances over a hundred trees having succumbed. The setting of the crop has in many cases also been detrimentally affected by the same cause.

(C. Craigie).

**Canterbury.**—Apples: Fair crop on all varieties, except Wolseleys and Delicious. Apricots: About average. Cherries: Crops slightly heavier than last year. Gooseberries: Very good. Nectarines: Light. Peaches: Patchy. Pears: Crops much lighter than last year, especially Nelis and Cole's. Plums: Average. Plums (Jap.): Patchy. Raspberries: Crops promise well, but badly in need of rain. Strawberries: Will suffer if rain does not fall soon. Tomatoes: Coming away well. Walnuts: Fair crop.

(L. Paynter).

**Otago.**—Apples: Heavy, except Jon. and Delicious, which are inclined to be light. Powdery Mildew general. Black Spot making an appearance at Taieri and Island Block. Apricots: Heavy. Considerable thinning required. Cherries: Average. Early varieties being marketed. Gooseberries: Heavy. Nectarines and Peaches: Heavy. Slightly affected with Peach Curl. Pears: Heavy. Slightly affected with Black Spot in Taieri district. Plums: Heavy. Raspberries: Every prospect of heavy crops. Strawberries: Average. Harvesting in full swing. Tomatoes: Every prospect of average crops.

(B. G. Goodwin).